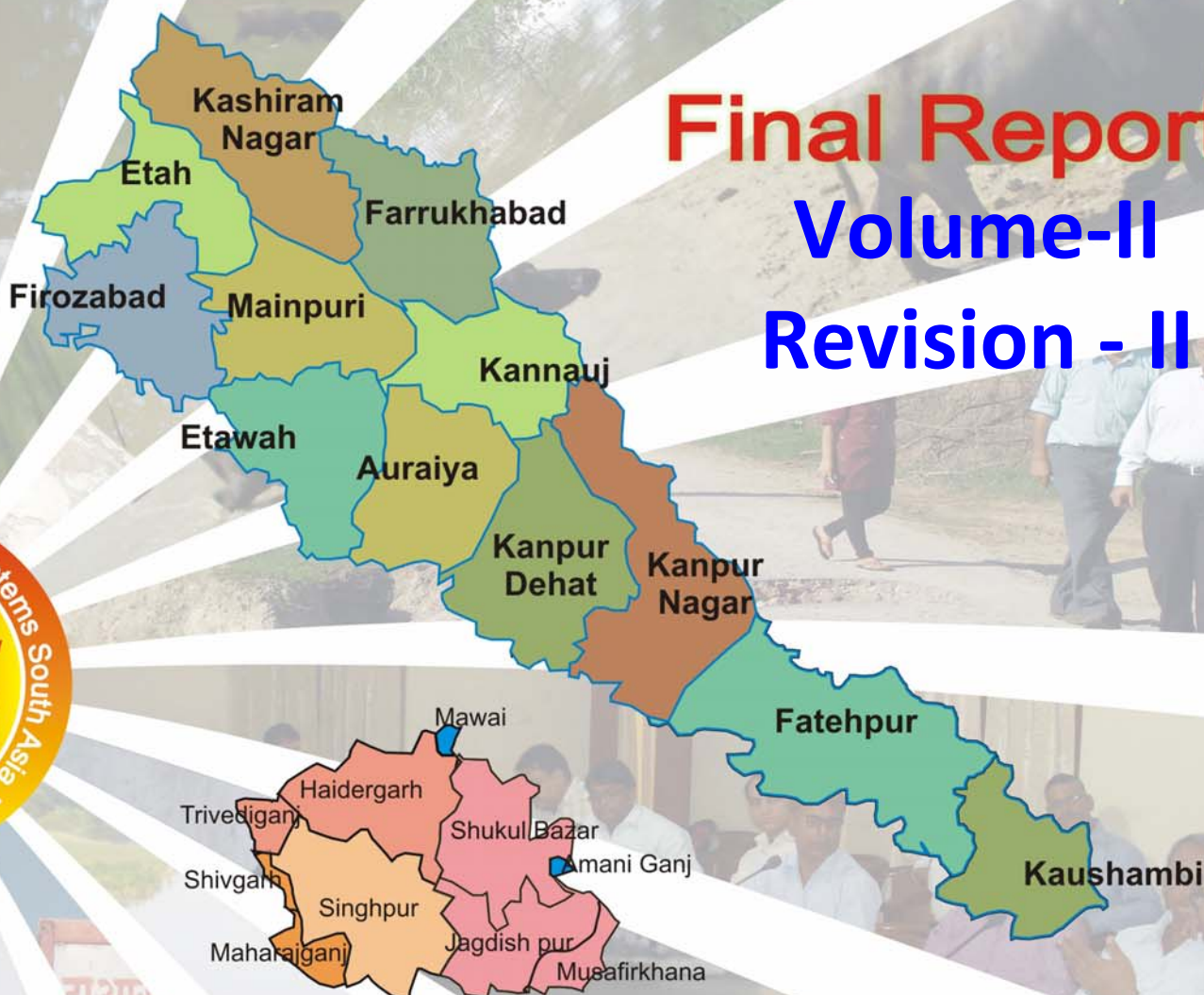


Social and Environmental Assessment Framework For Lower Ganga Canal System and Haidergarh Branch

Final Report Volume-II Revision - II



Submitted to:

Project Activity Core Team (PACT)

WALMI Bhawan, Utrethia, Telibagh,
Lucknow 226026

Submitted by:

IRG Systems South Asia Pvt. Ltd.

Lower Ground Floor, AADI Building,
2-Balbir Saxena Marg, Hauz Khas,
New Delhi 110 016, INDIA
Tel: +91-11-4597 4500 / 4597
Fax: +91-11-4175 9514
www.irgssa.com

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Table of Contents

Annexure 2.1- A Gist of Policies.....	2
Annexure 4.1- Secondary Data LGC.....	54
Annexure 4.2 - Secondary Data Haidergarh.....	96
Annexure 4.3: Details of Main Canals & Ground Water in LGC.....	127
Annexure 4.4: Year wise Surface Water Quality Status.....	132
Annexure 5.1: Findings of FGD.....	137
Annexure 6.2 A: A summary of various Govt. Policies and Orders.....	183

Annexure 2.1- Policies and Regulatory Framework

Constitutional provisions - The Constitution of India articulates a direct commitment to environmental protection, as directive principle under Article 48-A of Indian Constitution, which stipulates that the "*state shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country*". Under fundamental duties of citizens, Article 51-A (g) stipulates "*It shall be the duty of every citizen of India to protect and improve the natural environment, including forests, lakes, rivers and wildlife and to have compassion for living creatures*". The directive principle under Articles 49 and 51-A (f) also recognizes the importance of protecting the sites of cultural heritage as part of the total environment. Thus, the Indian constitution does provide the necessary support for framing and enforcement of environmental legislation.

Schedule VII of the Indian Constitution classifies the various legislative subjects into three categories, (a) union list, (b) state list and, (c) concurrent list. The legislations in the union list are enacted by Indian parliament, while state legislatures are empowered to enact necessary legislations for the state list. The concurrent list specifies the subjects that are to be looked after jointly by the central and state governments. The principal legislations for environmental management are passed by the Indian Parliament, and the Government of India has enunciated legislations for protection of the environment. There are a number of key environment Acts, rules and notifications at national level; state and district levels which are involved for implementation of environmental and social safeguards.

National Water Policy (NWP) - The National Water Policy (NWP), first adopted in September, 1987 by the GoI, has emphasized the need for integrated water resources management in a basin context. This policy has been reviewed and updated in 2002 in response to a number of new issues that have emerged subsequently. Although para 5 of NWP mentions about ecology, it accords low priority to it but indirectly recognises water use for fresh water" ecosystems. It states that, "Preservation of the quality of environment and the ecological balance should be a primary consideration. It further states that, adverse impact(s) on the environment should be minimised and should be offset by adequate compensatory measures. On resettlement and rehabilitation it speaks of the need of a "skeletal national policy" and would like states to evolve their own detailed policies. The revised National Water Policy (MoWR, GoI) has highlighted that water is scarce resource and a part of eco-system have to be managed in an integrated and environmentally sustainable manner adopting basin approach. The salient points of the National Water Policy are highlighted in Box 2.1. There are also several sections covering aspects of flood control and management, water conservation, drought-prone area development, etc., besides institutional mechanism, private sector participation and participatory approach to water resources management.

Box 2.1: National Water Policy 2002 – Salient Points

- Water is a scarce and precious national resource to be planned, developed and conserved and managed as such, and on an integrated and environmentally sound basis, keeping in view the socio-economic aspects and needs of the States.
- Water is part of a larger ecological system. Realising the importance and scarcity attached to fresh water, it has to be treated as an essential environment for sustaining all life forms.
- Water resources development and management will have to be planned for a hydrological unit such as drainage basin as a whole or for a sub-basin, multi-sectored, taking into account surface and ground water for sustainable use incorporating quantity and quality aspects as well as environmental considerations.
- There should be an integrated and multi-disciplinary approach to the planning, formulation, clearance and implementation of projects, including catchments area treatment and management, environmental and ecological aspects, the rehabilitation of affected people and command area development.
- The drainage system should form an integral part of any irrigation project right from planning stage
- The detrimental environmental consequences of over-exploitation of ground water need to be effectively prevented by the Central and State Governments.
- There should be a close integration of water-use and land-use policies.
- Water allocation in an irrigation system should be done with due regard to equity and social justice.
- Reclamation of water logged/ saline affected land by scientific and cost effective methods should form a part of command area development programme.
- Effluents should be treated to acceptable levels and standards before discharging them in to natural streams and that minimum flow should be ensured in the perennial streams for maintaining ecology and social considerations.
- Special efforts should be made to investigate and formulate projects either in, or for the benefit of, areas inhabited by tribal or other socially disadvantaged groups such as socially weak, scheduled castes and scheduled tribes.

UP State Water Policy - Uttar Pradesh adopted a progressive State Water Policy in Dec 1999, initiating much-needed radical reforms in the way the water resources of the state are managed and the proposed program and project seeks to initiate the implementation of this policy in the selected areas. The Policy is also important from an environmental and social viewpoint and includes references to:

1. Adequate provision for ecological, navigational, recreational and other purposes;
2. Key concern about the quality of water, its protection against pollution and safeguards against
3. Water-related health hazards;
4. Focus on basic drinking water and sanitation needs;
5. Consideration of integrated river basin planning as a unit of development;
6. Focus on data, information and knowledge-base development for decision-making;
7. A special focus on resettlement and rehabilitation of affected persons; and,
8. Participatory Irrigation Management.

Box 2.2: Uttar Pradesh State Water Policy (1999) – Key Principles

- Ensure ecological and environmental balance while developing water resources
- Promote equity and social justice among individuals and groups of users in water resource allocation and management
- Provide a substantive legal framework for management, and a Management Information System (M.I.S.) for effective monitoring of policy implementation

The UP State Water Policy developed in consonance with the GoI National Water Policy of 1987 with an objective of (a) ensure preservation of scarce water resources, (b) optimize water resource utilization to bring about qualitative improvement in water

resource management which should include users' participation, (c) decentralize authority to manage water resources, (d) promote equity and social justice among individuals and groups of users in water resource allocation and management, (e) provide a substantive legal framework to manage and develop adequate information and a knowledge base to promote research and training facilities in the water sector, and (f) to provide mechanisms for the resolution of conflicts between various users.

The key principles underlying State Water Policy in relation to the social and environmental safeguards are highlighted in Box 2.2.

Among the important provisions included in this policy document are: (a) *Ecology & Environment* - All water resource projects should be examined from an ecological and environmental standpoint and, wherever needed, remedial measures should form a part of the project itself and be implemented along with it. A minimum flow in the natural streams should be allowed; (b) *Water Harvesting* - Water harvesting should be given consideration in planning water resources. Viable projects, especially in scarce ground water areas, should be investigated and implemented to increase surface water availability; this would also help in recharging ground water; (c) *Ecological Health and other needs* - All water resources projects shall give due regard to "ecological health" and other needs for which adequate provision shall be made on a priority basis.

The Policy includes an outline of an Action Plan focussing on the need for enactment of legislation to regulate surface and ground water resources and their conjunctive use, and to provide for other institutional/administrative reforms, including creation of a State Water Board.

UP Agricultural Policy - The Agricultural policy, formulated by the Government of Uttar Pradesh is an important initiative that addresses the water availability issues in the state. These documents stress the need for: (a) conservation and conjunctive use of surface and groundwater; (b) watershed management and rainwater harvesting; and (c) to address depletion of groundwater levels and soil and water conservation.

Recent government reform initiatives are designed to address the entire technical and institutional gamut of water resource sector in Uttar Pradesh.

Policy framework for the environmental and natural resource safeguards

Policy framework for environmental and natural resources safeguard consists of National Environment Policy 2006, National Forest Policy and UP State Forest Policy described below.

GOI National Environment Policy - In 2006, the National Environment Policy was formulated and placed on the web for wide circulation. The main features that appear new in the proposed policy are summarized below:

1. The definition of environment has been enlarged to include all entities, natural or manmade, external to oneself, which provide value, now or perhaps in the future, to humankind.
2. Foundational aspirations have been addressed, which are (i) that human beings should be able to enjoy a decent quality of life; (ii) that humanity should become capable of respecting the finiteness of the biosphere; and (iii) that neither the

aspiration for the good life, nor the recognition of biophysical limits should preclude the search for greater justice in the world. The principles of good governance, viz., transparency, rationality, accountability, reduction in time and costs and participation of stakeholders, have been incorporated in the action points.

4. Mainstreaming environment in all activities has been explicitly emphasized.
5. Responsibilities of the state and the citizens have been affirmed in the light of the amendments introducing fundamental duties in the Constitution of India.
6. International commitments on global climate change, stratospheric ozone depletion, transfer of hazardous wastes and loss of biodiversity have been specifically mentioned.
7. Certain new principles for environmental management have been included in the policy, some of them based on judicial interpretations. These include:
 - The precautionary approach
 - Principle of polluter pays: general and strict liability of the polluter
 - Economic value of services of environmental resources
 - Priority for irreplaceable entities, e.g., Taj Mahal and the tiger
 - Equity, both intra-and inter-generational
 - Civil liability for environmental damage
 - State as trustee (*not owner*) of all natural resources
 - Standards should be set in the context of society and economy

National Forest Policy - The principal aim of the Forest Policy is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which is vital for sustenance of all life forms, human, animal and plant. The basic objectives that govern the National Forest Policy are the following:

1. Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that has been adversely disturbed by serious depletion of the forests of the country.
2. Conserving the natural heritage of the country by preserving the remaining natural forests with their vast variety of flora and fauna that represent the remarkable biological diversity and genetic resources of the nation.
3. Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and degradation of reservoirs.
4. Checking the extension of sand-dunes in the desert areas of Rajasthan and along the coastal tracts.
5. Increasing substantially the forest/tree cover in the country through immense afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
6. Meeting the requirements of the rural and tribal populations for fuel-wood, fodder, minor forest produce and small timber.
7. Increasing the productivity of forests to meet essential national needs.
8. Encouraging efficient utilisation of forest produce and substitution of wood.
9. Creating a massive people's movement with the involvement of women for achieving these objectives and to minimize pressure on existing forests.

Essentials of forest management as outlined in the National forest Policy include: (i) Existing forests and forest lands should be fully protected and their productivity improved. Forest and vegetal cover should be increased rapidly on hill slopes, in

catchment areas of rivers, lakes and reservoirs and ocean shores and, on semi-arid, and desert tracts; (ii) Diversion of good and productive agricultural lands to forestry should be discouraged in view of the need for increased food production; (iii) For the conservation of total biological diversity, the network of national parks, sanctuaries, biosphere reserves and other protected areas should be strengthened and extended adequately; (iv) Provision of sufficient fodder, fuel and pasture, especially in areas adjoining forests, is necessary in order to prevent depletion of forests beyond the sustainable limit (*Since fuel wood continues to be the predominant source of energy in rural areas, the programme of afforestation should be intensified with special emphasis on augmenting fuel wood production to meet the requirements of rural people*); (v) Minor forest produce provides sustenance to the tribal population, and to other communities residing in and around the forests. Such produce should be protected, improved and their production enhanced with due regard to generation of employment and income; and (vi) The forest policy states that strategies for area under forests, afforestation, social forestry & farm forestry, management of state forests, rights and concessions, diversion of forest lands for non-forest purposes, wildlife conservation, tribal people and forests, shifting cultivation, damage to forests from encroachments, fires and grazing, forest-based industries, forest extension, forestry education and forestry research should be prepared and implemented.

State Forest Policy of Uttar Pradesh - The main objectives of the State Forest Policy are to ensure environmental and ecological stability in the state. The important features of the state forest policy are given below.

1. Improvement of existing natural and planted forests by conservation, development and scientific and thoughtful management;
2. Formulation and implementation of schemes of afforestation and soil conservation in different types of degraded lands of state viz. usar, khader, ravines and blank denuded forest areas;
3. Increase of tree cover by social and agro forestry plantations on community, institutional and private lands;
4. To endeavor to reduce siltation of water and reservoirs, and the effects of floods and drought through measures to control soil erosion and denudation of soil, and through water conservation in the catchment areas of rivers, lakes and rivers, lakes and reservoirs;
5. To take measures to increase the existing forest cover and its productivity;
6. To reduce the gap between the demand and supply of forest produce for meeting the needs of fuel, fodder, minor forest produce and timber for rural poor and tribal;
7. To reduce the biotic pressure on forests by proper utilization of timber and other forest products, and by promoting the use of alternate materials;
8. To prepare and implement strategies for conservation of biodiversity and wild life in the state; and
9. To promote mass movements in the state, especially with the active participation of women and rural people residing near forest areas, so as to meet all the above objectives.

The above policy objectives are primarily aimed at conserving the existing forest and increasing the forest cover in a number of ways. Utilisation of forests for economic gain has been defined as one of secondary objective of the state.

The GOI and the UP State also have a significant environmental policy framework for dealing with environmental impacts. However, there is a need to strengthen these environmental policy frameworks with respect to mitigate environmental impacts within the irrigated agriculture sector in UP.

National Policy on Resettlement and Rehabilitation (R&R) - National policy on R&R deals with mitigating of potential losses and adverse impacts that may be caused by the implementation of the project. The principle objective of this policy is to convert 'all Project Affected Persons (PAP)' to 'Beneficiaries of the Project (BP)' by adopting an adaptive and consultative resettlement planning process ensuring displaced and all persons affected by the project would be duly compensated for their losses at replacement cost and provided with rehabilitation measures and settlement and social upgrading programs to assist them to improve, or at least maintain, their pre-project living standards, income-earning capacity and wealth.

Environmental Impact Assessment Notification, 2006:- The ministry of Environment and Forest published an Environmental Impact Assessment Notification in 2006, which is given below:-

(Published in the Gazette of India, Extraordinary, Part-II, and Section 3, Sub-section (ii))

MINISTRY OF ENVIRONMENT AND FORESTS

New Delhi 14th September, 2006

Notification

S.O. 1533 Whereas, a draft notification **under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 for imposing** certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India¹, unless prior environmental clearance has been accorded in accordance with the objectives of National Environment Policy **as approved by the Union Cabinet on 18th May, 2006** and the procedure specified in the notification, by the Central Government or the State or Union territory Level Environment Impact Assessment Authority (SEIAA), to be constituted by the Central Government in consultation with the State Government or the Union territory Administration concerned under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for the purpose of this notification, was published in the Gazette of India ,Extraordinary, Part II, section 3, sub-section (ii) vide number S.O. 1324 (E) dated the 15th September ,2005 inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 15th September, 2005;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986, read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification number S.O. 60 (E) dated the 27th January, 1994, except in respect of things done or omitted to be done before such supersession, the Central Government hereby directs that on and from the date of its publication the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to this notification entailing capacity addition with change in process and or technology shall be undertaken in any part of India only after the prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified hereinafter in this notification.

¹Includes the territorial waters

2. Requirements of prior Environmental Clearance (EC):- The following projects or activities shall require prior environmental clearance from the concerned regulatory authority, which shall hereinafter referred to be as the Central Government in the Ministry of Environment and Forests for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- (i) All new projects or activities listed in the Schedule to this notification;
- (ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, that is, projects or activities which cross the threshold limits given in the Schedule, after expansion or modernization;
- (iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

3. State Level Environment Impact Assessment Authority:- (1) A State Level Environment Impact Assessment Authority hereinafter referred to as the SEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of three Members including a Chairman and a Member – Secretary to be nominated by the State Government or the Union territory Administration concerned.

- (2) The Member-Secretary shall be a serving officer of the concerned State Government or Union territory administration familiar with environmental laws.
- (3) The other two Members shall be either a professional or expert fulfilling the eligibility criteria given in Appendix VI to this notification.
- (4) One of the specified Members in sub-paragraph (3) above who is an expert in the Environmental Impact Assessment process shall be the Chairman of the SEIAA.

- (5) The State Government or Union territory Administration shall forward the names of the Members and the Chairman referred in sub- paragraph 3 to 4 above to the Central Government and the Central Government shall constitute the SEIAA as an authority for the purposes of this notification within thirty days of the date of receipt of the names.
- (6) The non-official Member and the Chairman shall have a fixed term of three years (from the date of the publication of the notification by the Central Government constituting the authority).
- (7) All decisions of the SEIAA shall be unanimous and taken in a meeting.

4. Categorization of projects and activities:-

- (i) All projects and activities are broadly categorized in to two categories - Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.
- (ii) All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;
- (iii) All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, *will* require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In the absence of a duly constituted SEIAA or SEAC, a Category 'B' project shall be treated as a Category 'A' project;

5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government and SEACs (hereinafter referred to as the (EAC) and (SEAC) at the State or the Union territory level shall screen, scope and appraise projects or activities in Category 'A' and Category 'B' respectively. EAC and SEAC's shall meet at least once every month.

- (a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union territory Administration with identical composition;
- (b) The Central Government may, with the prior concurrence of the concerned State Governments or the Union territory Administrations, constitutes one SEAC for more than one State or Union territory for reasons of administrative convenience and cost;
- (c) The EAC and SEAC shall be reconstituted after every three years;

(d) The authorised members of the EAC and SEAC, concerned, may inspect any site(s) connected with the project or activity in respect of which the prior environmental clearance is sought, for the purposes of screening or scoping or appraisal, with prior notice of at least seven days to the applicant, who shall provide necessary facilities for the inspection;

(e) The EAC and SEACs shall function on the principle of collective responsibility. The Chairperson shall endeavour to reach a consensus in each case, and if consensus cannot be reached, the view of the majority shall prevail.

6. Application for Prior Environmental Clearance (EC):-

An application seeking prior environmental clearance in all cases shall be made in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II, after the identification of prospective site(s) for the project and/or activities to which the application relates, before commencing any construction activity, or preparation of land, at the site by the applicant. The applicant shall furnish, along with the application, a copy of the pre-feasibility project report except that, in case of construction projects or activities (item 8 of the Schedule) in addition to Form 1 and the Supplementary Form 1A, a copy of the conceptual plan shall be provided, instead of the pre-feasibility report.

7. Stages in the Prior Environmental Clearance (EC) Process for New Projects:-

7(i) The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:-

- Stage (1) Screening (Only for Category 'B' projects and activities)
- Stage (2) Scoping
- Stage (3) Public Consultation
- Stage (4) Appraisal

I. Stage (1) - Screening:

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project. The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

II. Stage (2) - Scoping:

(i) "Scoping": refers to the process by which the Expert Appraisal Committee in the case of Category 'A' projects or activities, and State level Expert Appraisal Committee in the case of Category 'B1' projects or activities, including applications for expansion and/or modernization and/or change in product mix of existing projects or activities, determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the Terms of Reference on

the basis of the information furnished in the prescribed application Form1/Form 1A including Terms of Reference proposed by the applicant, a site visit by a sub- group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction/Township/Commercial Complexes /Housing) shall not require Scoping and will be appraised on the basis of Form 1/ Form 1A and the conceptual plan.

(ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form 1. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities. If the Terms of Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form 1, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.

(iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC concerned at this stage itself. In case of such rejection, the decision together with reasons for the same shall be communicated to the applicant in writing within sixty days of the receipt of the application.

III. Stage (3) - Public Consultation:

(i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category B1 projects or activities shall undertake Public Consultation, except the following:-

- (a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).
- (b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
- (c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
- (d) all Building /Construction projects/Area Development projects and Townships (item 8).
- (e) all Category 'B2' projects and activities.
- (f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.

(ii) The Public Consultation shall ordinarily have two components comprising of:-

- (a) a public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;
- (b) obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.

(iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45(forty five) of a request to the effect from the applicant.

(iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period directly to the regulatory authority concerned as above, the regulatory authority shall engage another public agency or authority which is not subordinate to the regulatory authority, to complete the process within a further period of forty five days,.

(v) If the public agency or authority nominated under the sub paragraph (iii) above reports to the regulatory authority concerned that owing to the local situation, it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed, it shall report the facts in detail to the concerned regulatory authority, which may, after due consideration of the report and other reliable information that it may have, decide that the public consultation in the case need not include the public hearing.

(vi) For obtaining responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity, the concerned regulatory authority and the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) shall invite responses from such concerned persons by placing on their website the Summary EIA report prepared in the format given in Appendix IIIA by the applicant along with a copy of the application in the prescribed form , within seven days of the receipt of a written request for arranging the public hearing . Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right, source specified in the application shall not be placed on the web site. The regulatory authority concerned may also use other appropriate media for ensuring wide publicity about the project or activity. The regulatory authority shall, however, make available on a written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing. All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means.

(vii) After completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.

IV. Stage (4) - Appraisal:

(i) Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and

conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.

(ii) The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant validated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iii) The appraisal of an application shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days. The prescribed procedure for appraisal is given in Appendix V ;

7 (ii). Prior Environmental Clearance (EC) process for Expansion or Modernization or Change of product mix in existing projects:

All applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product –mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

8. Grant or Rejection of Prior Environmental Clearance (EC):

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views

of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.

(iii) In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified in sub-paragraphs (i) or (ii) above, as applicable, the applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

(iv) On expiry of the period specified for decision by the regulatory authority under paragraph (i) and (ii) above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.

(v) Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.

(vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

9. Validity of Environmental Clearance (EC):

The “Validity of Environmental Clearance” is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted under sub paragraph (iv) of paragraph 7 above, to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects (item 8 of the Schedule), to which the application for prior environmental clearance refers. The prior environmental clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects (item 1(c) of the Schedule), project life as estimated by Expert Appraisal Committee or State Level Expert Appraisal Committee subject to a maximum of thirty years for mining projects and five years in the case of all other projects and activities. However, in the case of Area Development projects and Townships [item 8(b)], the validity period shall be limited only to such activities as may be the responsibility of the applicant as a developer. This period of validity may be extended by the regulatory authority concerned by a maximum period of five years provided an application is made to the regulatory authority by the applicant within the validity period, together with an updated Form 1, and Supplementary Form 1A, for Construction projects or activities (item 8 of the Schedule). In this regard the regulatory authority may also consult the Expert Appraisal Committee or State Level Expert Appraisal Committee as the case may be.

10. Post Environmental Clearance Monitoring:

- (i) It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- (ii) All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority.

11. Transferability of Environmental Clearance (EC):

A prior environmental clearance granted for a specific project or activity to an applicant may be transferred during its validity to another legal person entitled to undertake the project or activity on application by the transferor, or by the transferee with a written “no objection” by the transferor, to, and by the regulatory authority concerned, on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period. No reference to the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned is necessary in such cases.

12. Operation of EIA Notification, 1994, till disposal of pending cases:

From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27th January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such suppression to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I, or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification.

[No. J-11013/56/2004-IA-II (I)]

(R.CHANDRAMOHAN)
JOINT SECRETARY TO THE GOVERNMENT OF INDIA

SCHEDULE

(See paragraph 2 and 7)

LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
1		Mining, extraction of natural resources and power generation (for a specified production capacity)		
(a) (1)	(2)	(3)	(4)	(5)
1	Mining of minerals	≥ 50 ha. of mining lease area Asbestos mining irrespective of mining area	<50 ha ≥ 5 ha .of mining lease area.	General Condition shall apply <u>Note</u> Mineral prospecting (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey
1(b)	Offshore and onshore oil and gas exploration, development & production	All projects		<u>Note</u> Exploration Surveys (not involving drilling) are exempted provided the concession areas have got previous clearance for physical survey
1(c)	River Valley projects	(i) ≥ 50 MW hydroelectric power generation;	(i) < 50 MW ≥ 25 MW	General Condition shall

		(ii) \geq 10,000 ha. of culturable command area	hydroelectric power generation; (ii) $<$ 10,000 ha. of culturable command area	apply
1(d)	Thermal Power Plants	\geq 500 MW (coal/lignite/naphta & gas based); \geq 50 MW (Pet coke diesel and all other fuels -)	$<$ 500 MW (coal/lignite/napt ha & gas based); $<$ 50 MW \geq 5MW (Pet coke ,diesel and all other fuels)	General Condition shall apply
(1)	(2)	(3)	(4)	(5)
1(e)	Nuclear power projects and processing of nuclear fuel	All projects	-	
2		Primary Processing		
2(a)	Coal washeries	\geq 1 million ton/annum throughput of coal	$<$ 1million ton/annum throughput of coal	General Condition shall apply (If located within mining area the proposal shall be appraised together with the mining proposal)
2 (b)	Mineral beneficiation	\geq 0.1million ton/annum mineral throughput	$<$ 0.1million ton/annum mineral throughput	General Condition shall apply (Mining proposal with Mineral beneficiation shall be appraised together for grant of clearance)

3		Materials Production		
(1)	(2)	(3)	(4)	(5)
3(a)	Metallurgical industries (ferrous & non ferrous)	a)Primary metallurgical industry All projects b) Sponge iron manufacturing ≥ 200 TPD c)Secondary metallurgical processing industry All toxic and heavy metal producing units $\geq 20,000$ tonnes /annum -	Sponge iron manufacturing <200TPD Secondary metallurgical processing industry i.)All toxic and heavy metal producing units <20,000 tonnes /annum ii.)All other non –toxic secondary metallurgical processing industries >5000 tonnes/annum	General Condition shall apply for Sponge iron manufacturing
3(b)	Cement plants	≥ 1.0 million tonnes/annum production capacity	<1.0 million tonnes/annum production capacity. All Stand alone grinding units	General Condition shall apply
4		Materials Processing		
(1)	(2)	(3)	(4)	(5)
4(a)	Petroleum refining industry	All projects	-	-

4(b)	Coke oven plants	≥2,50,000 tonnes/annum -	<2,50,000 & ≥25,000 tonnes/annum	-
4(c)	Asbestos milling and asbestos based products	All projects	-	-
4(d)	Chlor-alkali industry	≥300 TPD production capacity or a unit located outside the notified industrial area/ estate	<300 TPD production capacity and located within a notified industrial area/ estate	Specific Condition shall apply No new Mercury Cell based plants will be permitted and existing units converting to membrane cell technology are exempted from this Notification
4(e)	Soda ash Industry	All projects	-	-
4(f)	Leather/skin/hide processing industry	New projects outside the industrial area or expansion of existing units outside the industrial area	All new or expansion of projects located within a notified industrial area/ estate	Specific condition shall apply
5		Manufacturing/Fabrication		
5(a)	Chemical fertilizers	All projects	-	-
5(b)	Pesticides industry and pesticide specific intermediates (excluding formulations)	All units producing technical grade pesticides	-	-
(1)	(2)	(3)	(4)	(5)
5(c)	Petro-chemical	All projects	-	-

	complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)	-		
5(d)	Manmade fibres manufacturing	Rayon	Others	General Condition shall apply
5(e)	Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)	Located out side the notified industrial area/ estate -	Located in a notified industrial area/ estate	Specific Condition shall apply
5(f)	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	Located out side the notified industrial area/ estate	Located in a notified industrial area/ estate	Specific Condition shall apply
5(g)	Distilleries	(i) All Molasses based distilleries (ii) All Cane juice/ non-molasses based distilleries ≥ 30 KLD	All Cane juice/non-molasses based distilleries – < 30 KLD	General Condition shall apply

5(h)	Integrated paint industry	-	All projects	General Condition shall apply
(1)	(2)	(3)	(4)	(5)
5(i)	Pulp & paper industry excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp with out bleaching	Pulp manufacturing and Pulp& Paper manufacturing industry -	Paper manufacturing industry without pulp manufacturing	General Condition shall apply
5(j)	Sugar Industry	- -	≥ 5000 tcd cane crushing capacity	General Condition shall apply
5(k)	Induction/arc furnaces/cupola furnaces 5TPH or more	- -	All projects	General Condition shall apply
6		Service Sectors		
6(a)	Oil & gas transportation pipe line (crude and refinery/ petrochemical products), passing through national parks /sanctuaries/coral reefs /ecologically sensitive areas including LNG Terminal	All projects -		-
(1)	(2)	(3)	(4)	(5)
6(b)	Isolated storage & handling of hazardous chemicals (As per threshold planning	-	All projects	General Condition shall apply

	quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)			
7		Physical Infrastructure including Environmental Services		
7(a)	Air ports	All projects	-	-
7(b)	All ship breaking yards including ship breaking units	All projects	-	-
7(c)	Industrial estates/ parks/ complexes/ areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather Complexes.	<p>If at least one industry in the proposed industrial estate falls under the Category A, entire industrial area shall be treated as Category A, irrespective of the area.</p> <p>Industrial estates with area greater than 500 ha. and housing at least one Category B industry.</p>	<p>—Industrial estates housing at least one Category B industry and area <500 ha.</p> <p>Industrial estates of area > 500 ha. and not housing any industry belonging to Category A or B.</p>	<p>Special condition shall apply</p> <p>Note: Industrial Estate of area below 500 ha. and not housing any industry of category A or B does not require clearance.</p>
7(d)	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	All integrated facilities having incineration & landfill or incineration alone	All facilities having land fill only	General Condition shall apply
(1)	(2)	(3)	(4)	(5)
7(e)	Ports, Harbours	≥ 5 million TPA of cargo handling capacity (excluding fishing harbours)	< 5 million TPA of cargo handling capacity and/or ports/ harbours ≥ 10,000 TPA of fish handling capacity	General Condition shall apply
7(f)	Highways	i) New National High ways; and	i) New State High ways; and	General Condition shall

		ii) Expansion of National High ways greater than 30 KM, involving additional right of way greater than 20m involving land acquisition and passing through more than one State.	ii) Expansion of National / State Highways greater than 30 km involving additional right of way greater than 20m involving land acquisition.	apply
7(g)	Aerial ropeways		All projects	General Condition shall apply
7(h)	Common Effluent Treatment Plants (CETPs)		All projects	General Condition shall apply
7(i)	Common Municipal Solid Waste Management Facility (CMSWMF)		All projects	General Condition shall apply
(1)	(2)	(3)	(4)	(5)
8		Building /Construction projects/Area Development projects and Townships		
8(a)	Building and Construction projects		≥20000 sq.mtrs and <1,50,000 sq.mtrs. of built-up area#	#(built up area for covered construction; in the case of facilities open to the sky, it will be the activity area)
8(b)	Townships and Area Development projects.		Covering an area ≥ 50 ha and or built up area ≥1,50,000 sq .mtrs ++	++All projects under Item 8(b) shall be appraised as Category B1

Note:-

General Condition (GC):

Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically Polluted areas as notified by the Central Pollution Control Board

from time to time, (iii) Notified Eco-sensitive areas, (iv) inter-State boundaries and international boundaries.

Specific Condition (SC):

If any Industrial Estate/Complex / Export processing Zones /Special Economic Zones/Biotech Parks / Leather Complex with homogeneous type of industries such as Items 4(d), 4(f), 5(e), 5(f), or those Industrial estates with pre –defined set of activities (not necessarily homogeneous, obtains prior environmental clearance, individual industries including proposed industrial housing within such estates /complexes will not be required to take prior environmental clearance, so long as the Terms and Conditions for the industrial estate/complex are complied with (Such estates/complexes must have a clearly identified management with the legal responsibility of ensuring adherence to the Terms and Conditions of prior environmental clearance, who may be held responsible for violation of the same throughout the life of the complex/estate).

APPENDIX I

(See paragraph – 6)

FORM 1

(I) Basic Information

Name of the Project:

Location / site alternatives under consideration:

Size of the Project: *

Expected cost of the project:

Contact Information:

Screening Category:

- *Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.,)*

(II) Activity

- 1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
1.2	Clearance of existing land, vegetation and buildings?		
1.3	Creation of new land uses?		
1.4	Pre-construction investigations e.g. bore holes, soil testing?		
1.5	Construction works?		
1.6	Demolition works?		
1.7	Temporary sites used for construction works or housing of construction workers?		
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations		
1.9	Underground works including mining or tunneling?		
1.10	Reclamation works?		
1.11	Dredging?		
1.12	Offshore structures?		
1.13	Production and manufacturing processes?		
1.14	Facilities for storage of goods or materials?		
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?		
1.16	Facilities for long term housing of operational workers?		
1.17	New road, rail or sea traffic during construction or operation?		

1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?		
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?		
1.20	New or diverted transmission lines or pipelines?		
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?		
1.23	Abstraction or transfers of water from ground or surface waters?		
1.24	Changes in water bodies or the land surface affecting drainage or run-off?		
1.25	Transport of personnel or materials for construction, operation or decommissioning?		
1.26	Long-term dismantling or decommissioning or restoration works?		
1.27	Ongoing activity during decommissioning which could have an impact on the environment?		
1.28	Influx of people to an area in either temporarily or permanently?		
1.29	Introduction of alien species?		
1.30	Loss of native species or genetic diversity?		
1.31	Any other actions?		

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)		
2.2	Water (expected source & competing users) unit: KLD		
2.3	Minerals (MT)		
2.4	Construction material – stone, aggregates, sand / soil (expected source MT)		
2.5	Forests and timber (source – MT)		
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		
2.7	Any other natural resources (use appropriate standard units)		

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)		
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)		
3.3	Affect the welfare of people e.g. by changing living conditions?		
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the		

	elderly etc.,		
3.5	Any other causes		

**4. Production of solid wastes during construction or operation or
decommissioning (MT/month)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes		
4.2	Municipal waste (domestic and or commercial wastes)		
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)		
4.4	Other industrial process wastes		
4.5	Surplus product		
4.6	Sewage sludge or other sludge from effluent treatment		
4.7	Construction or demolition wastes		
4.8	Redundant machinery or equipment		
4.9	Contaminated soils or other materials		
4.10	Agricultural wastes		
4.11	Other solid wastes		

**5. Release of pollutants or any hazardous, toxic or noxious substances to
air (Kg/hr)**

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
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5.1	Emissions from combustion of fossil fuels from stationary or mobile sources		
5.2	Emissions from production processes		
5.3	Emissions from materials handling including storage or transport		
5.4	Emissions from construction activities including plant and equipment		
5.5	Dust or odours from handling of materials including construction materials, sewage and waste		
5.6	Emissions from incineration of waste		
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)		
5.8	Emissions from any other sources		

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers		
6.2	From industrial or similar processes		
6.3	From construction or demolition		
6.4	From blasting or piling		
6.5	From construction or operational traffic		
6.6	From lighting or cooling systems		
6.7	From any other sources		

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)		
7.3	By deposition of pollutants emitted to air into the land or into water		
7.4	From any other sources		
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?		

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances		
8.2	From any other causes		
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?		

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	<p>Lead to development of supporting, lities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other 		
9.2	Lead to after-use of the site, which could have an impact on the environment		
9.3	Set a precedent for later developments		
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects		

(III) Environmental Sensitivity

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		

2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests		
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration		
4	Inland, coastal, marine or underground waters		
5	State, National boundaries		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas		
7	Defence installations		
8	Densely populated or built-up area		
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>)		
10	Areas containing important, high quality or scarce resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)		
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)		
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>)		

(IV). Proposed Terms of Reference for EIA studies

APPENDIX II

(See paragraph 6)

FORM-1 A (only for construction projects listed under item 8 of the Schedule)

CHECK LIST OF ENVIRONMENTAL IMPACTS

(Project proponents are required to provide full information and wherever necessary attach explanatory notes with the Form and submit along with proposed environmental management plan & monitoring programme)

1. LAND ENVIRONMENT

(Attach panoramic view of the project site and the vicinity)

1.1. Will the existing landuse get significantly altered from the project that is not consistent with the surroundings? (Proposed landuse must conform to the approved Master Plan / Development Plan of the area. Change of landuse if any and the statutory approval from the competent authority be submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.

1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.

1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology).

1.4. Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).

1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)

1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)

1.7. Give details regarding water supply, waste handling etc during the construction period.

1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)

1.9. Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)

2. WATER ENVIRONMENT

2.1. Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.

2.2. What is the capacity (dependable flow or yield) of the proposed source of water?

2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)

2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)

2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)

2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)

2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created.

2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?

2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)

2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)

2.11. How is the storm water from within the site managed?(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)

2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)

2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)

2.14. Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.

3. VEGETATION

3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with it's unique features, if any)

3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)

3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

4. FAUNA

4.1. Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.

4.2. Any direct or indirect impacts on the avifauna of the area? Provide details.

4.3. Prescribe measures such as corridors, fish ladders etc to mitigate adverse impacts on fauna

5. AIR ENVIRONMENT

5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)

5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.

5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.

5.4. Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.

5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.

5.6. What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

6. AESTHETICS

6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?

6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?

6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.

6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

7. SOCIO-ECONOMIC ASPECTS

7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details.

7.2. Give details of the existing social infrastructure around the proposed project.

7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

8. BUILDING MATERIALS

8.1. May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)

8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?

8.3. Are recycled materials used in roads and structures? State the extent of savings achieved?

8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

9. ENERGY CONSERVATION

9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?

- 9.2. What type of, and capacity of, power back-up to you plan to provide?
- 9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?
- 9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.
- 9.5. Does the layout of streets & buildings maximise the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.
- 9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?
- 9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.
- 9.8. What are the likely effects of the building activity in altering the micro-climates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?
- 9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.
- 9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.
- 9.11. If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.
- 9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.
- 9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used.

10. Environment Management Plan

The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life

cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

APPENDIX III

(See paragraph 7

GENERIC STRUCTURE OF ENVIRONMENTAL IMPACT ASSESMENT DOCUMENT

S.NO	EIA STRUCTURE	CONTENTS
1.	Introduction	<ul style="list-style-type: none"> • Purpose of the report • Identification of project & project proponent • Brief description of nature, size, location of the project and its importance to the country, region • Scope of the study – details of regulatory scoping carried out (As per Terms of Reference)
2.	Project Description	<ul style="list-style-type: none"> • Condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Details should be provided to give clear picture of the following: <ul style="list-style-type: none"> • Type of project • Need for the project • Location (maps showing general location, specific location, project boundary & project site layout) • Size or magnitude of operation (incl. Associated activities required by or for the project) • Proposed schedule for approval and implementation • Technology and process description • Project description. Including drawings showing project layout, components of project etc. Schematic

		<p>representations of the feasibility drawings which give information important for EIA purpose</p> <ul style="list-style-type: none"> • Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements (as required by the scope) • Assessment of New & untested technology for the risk of technological failure
3.	Description of the Environment	<ul style="list-style-type: none"> • Study area, period, components & methodology • Establishment of baseline for valued environmental components, as identified in the scope • Base maps of all environmental components
4.	Anticipated Environmental Impacts & Mitigation Measures	<ul style="list-style-type: none"> • Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operations, final decommissioning or rehabilitation of a completed project • Measures for minimizing and / or offsetting adverse impacts identified • Irreversible and Irretrievable commitments of environmental components • Assessment of significance of impacts (Criteria for determining significance, Assigning significance) • Mitigation measures
5.	Analysis of Alternatives (Technology & Site)	<ul style="list-style-type: none"> • In case, the scoping exercise results in need for alternatives: • Description of each alternative • Summary of adverse impacts of each alternative • Mitigation measures proposed for each alternative and • Selection of alternative
6.	Environmental Monitoring Program	<ul style="list-style-type: none"> • Technical aspects of monitoring the effectiveness of mitigation measures (incl. Measurement methodologies, frequency, location, data analysis, reporting schedules, emergency procedures, detailed budget & procurement schedules)

7.	Additional Studies	<ul style="list-style-type: none"> • Public Consultation • Risk assessment • Social Impact Assessment. R&R Action Plans
8.	Project Benefits	<ul style="list-style-type: none"> • Improvements in the physical infrastructure • Improvements in the social infrastructure • Employment potential –skilled; semi-skilled and unskilled • Other tangible benefits
9.	Environmental Cost Benefit Analysis	If recommended at the Scoping stage
10.	EMP	<ul style="list-style-type: none"> • Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA
11	Summary & Conclusion (This will constitute the summary of the EIA Report)	<ul style="list-style-type: none"> • Overall justification for implementation of the project • Explanation of how, adverse effects have been mitigated
12.	Disclosure of Consultants engaged	<ul style="list-style-type: none"> • The names of the Consultants engaged with their brief resume and nature of Consultancy rendered

APPENDIX III A
(See paragraph 7)

CONTENTS OF SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT

The Summary EIA shall be a summary of the full EIA Report condensed to ten A-4 size pages at the maximum. It should necessarily cover in brief the following Chapters of the full EIA Report: -

1. Project Description
2. Description of the Environment
3. Anticipated Environmental impacts and mitigation measures
4. Environmental Monitoring Programme
5. Additional Studies
6. Project Benefits
7. Environment Management Plan

APPENDIX IV
(See paragraph 7)

PROCEDURE FOR CONDUCT OF PUBLIC HEARING

1.0 The Public Hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity District -wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

2.0 The Process:

2.1 The Applicant shall make a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is extending beyond a State or Union Territory, the public hearing is mandated in each State or Union Territory in which the project is sited and the Applicant shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

2.2 The Applicant shall enclose with the letter of request, at least 10 hard copies and an equivalent number of soft (electronic) copies of the draft EIA Report with the generic structure given in Appendix III including the Summary Environment Impact Assessment report in English and in the local language, prepared strictly in accordance with the Terms of Reference communicated after Scoping (Stage-2). Simultaneously the applicant shall arrange to forward copies, one hard and one soft, of the above draft EIA Report along with the Summary EIA report to the Ministry of Environment and Forests and to the following authorities or offices, within whose jurisdiction the project will be located:

- (a) District Magistrate/s
- (b) Zila Parishad or Municipal Corporation
- (c) District Industries Office
- (d) Concerned Regional Office of the Ministry of Environment and Forests

2.3 On receiving the draft Environmental Impact Assessment report, the above-mentioned authorities except the MoEF, shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over. The Ministry of Environment and

Forests shall promptly display the Summary of the draft Environmental Impact Assessment report on its website, and also make the full draft EIA available for reference at a notified place during normal office hours in the Ministry at Delhi.

2.4 The SPCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment report (Appendix III A) for inspection in select offices or public libraries or panchayats etc. They shall also additionally make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices viz, Ministry of Environment and Forests, District Magistrate etc.

3.0 Notice of Public Hearing:

3.1 The Member-Secretary of the concerned SPCB or UTPCC shall finalize the date, time and exact venue for the conduct of public hearing within 7(seven) days of the date of receipt of the draft Environmental Impact Assessment report from the project proponent, and advertise the same in one major National Daily and one Regional vernacular Daily. A minimum notice period of 30(thirty) days shall be provided to the public for furnishing their responses;

3.2 The advertisement shall also inform the public about the places or offices where the public could access the draft Environmental Impact Assessment report and the Summary Environmental Impact Assessment report before the public hearing.

3.3 No postponement of the date, time, venue of the public hearing shall be undertaken, unless some untoward emergency situation occurs and only on the recommendation of the concerned District Magistrate the postponement shall be notified to the public through the same National and Regional vernacular dailies and also prominently displayed at all the identified offices by the concerned SPCB or Union Territory Pollution Control Committee;

3.4 In the above exceptional circumstances fresh date, time and venue for the public consultation shall be decided by the Member –Secretary of the concerned SPCB or UTPCC only in consultation with the District Magistrate and notified afresh as per procedure under 3.1 above.

4.0 The Panel

4.1 The District Magistrate or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, shall supervise and preside over the entire public hearing process.

5.0 Videography

5.1 The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while forwarding it to the Regulatory Authority concerned.

6.0 Proceedings

6.1 The attendance of all those who are present at the venue shall be noted and annexed with the final proceedings.

6.2 There shall be no quorum required for attendance for starting the proceedings.

6.3 A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary EIA report.

6.4 Every person present at the venue shall be granted the opportunity to seek information or clarifications on the project from the Applicant. The summary of the public hearing proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB or UTPCC and read over to the audience at the end of the proceedings explaining the contents in the vernacular language and the agreed minutes shall be signed by the District Magistrate or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.

6.5 A Statement of the issues raised by the public and the comments of the Applicant shall also be prepared in the local language and in English and annexed to the proceedings:-

6.6 The proceedings of the public hearing shall be conspicuously displayed at the office of the Panchyats within whose jurisdiction the project is located, office of the concerned Zila Parishad, District Magistrate, and the SPCB or UTPCC. The SPCB or UTPCC shall also display the proceedings on its website for general information. Comments, if any, on the proceedings which may be sent directly to the concerned regulatory authorities and the Applicant concerned.

7.0 Time period for completion of public hearing

7.1 The public hearing shall be completed within a period of 45 (forty five) days from date of receipt of the request letter from the Applicant. Therefore the SPCB or UTPCC concerned shall send the public hearing proceedings to the concerned regulatory authority within 8(eight) days of the completion of the public hearing. The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations.

7.2 If the SPCB or UTPCC fails to hold the public hearing within the stipulated 45(forty five) days, the Central Government in Ministry of Environment and Forests for Category 'A' project or activity and the State Government or Union Territory Administration for Category 'B' project or activity at the request of the SEIAA, shall engage any other agency or authority to complete the process, as per procedure laid down in this notification.

APPENDIX –V
(See paragraph 7)

PROCEDURE PRESCRIBED FOR APPRAISAL

1. The applicant shall apply to the concerned regulatory authority through a simple communication enclosing the following documents where public consultations are mandatory: -

- Final Environment Impact Assessment Report [20(twenty) hard copies and 1 (one) soft copy]
- A copy of the video tape or CD of the public hearing proceedings
- A copy of final layout plan (20 copies)
- A copy of the project feasibility report (1 copy)

2. The Final EIA Report and the other relevant documents submitted by the applicant shall be scrutinized in office within 30 days from the date of its receipt by the concerned Regulatory Authority strictly with reference to the TOR and the inadequacies noted shall be communicated electronically or otherwise in a single set to the Members of the EAC /SEAC enclosing a copy each of the Final EIA Report including the public hearing proceedings and other public responses received along with a copy of Form -1 or Form 1A and scheduled date of the EAC /SEAC meeting for considering the proposal .

3. Where a public consultation is not mandatory and therefore a formal EIA study is not required, the appraisal shall be made on the basis of the prescribed application Form 1 and a pre-feasibility report in the case of all projects and activities other than Item 8 of the Schedule .In the case of Item 8 of the Schedule, considering its unique project cycle , the EAC or SEAC concerned shall appraise all Category B projects or activities on the basis of Form 1, Form 1A and the conceptual plan and stipulate the conditions for environmental clearance . As and when the applicant submits the approved scheme /building plans complying with the stipulated environmental clearance conditions with all other necessary statutory approvals, the EAC /SEAC shall recommend the grant of environmental clearance to the competent authority.

4. Every application shall be placed before the EAC /SEAC and its appraisal completed within 60 days of its receipt with requisite documents / details in the prescribed manner.

5. The applicant shall be informed at least 15 (fifteen) days prior to the scheduled date of the EAC /SEAC meeting for considering the project proposal.
6. The minutes of the EAC /SEAC meeting shall be finalised within 5 working days of the meeting and displayed on the website of the concerned regulatory authority. In case the project or activity is recommended for grant of EC, then the minutes shall clearly list out the specific environmental safeguards and conditions. In case the recommendations are for rejection, the reasons for the same shall also be explicitly stated.

APPENDIX VI

(See paragraph 5)

COMPOSITION OF THE SECTOR/ PROJECT SPECIFIC EXPERT APPRAISAL COMMITTEE (EAC) FOR CATEGORY A PROJECTS AND THE STATE/UT LEVEL EXPERT APPRAISAL COMMITTEES (SEACs) FOR CATEGORY B PROJECTS TO BE CONSTITUTED BY THE CENTRAL GOVERNMENT `

1. The Expert Appraisal Committees (EAC(s) and the State/UT Level Expert Appraisal Committees (SEACs) shall consist of only professionals and experts fulfilling the following eligibility criteria:

Professional: The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA/MSc Degree, or (ii) in case of Engineering /Technology/Architecture disciplines, 4 years formal training in a professional training course together with prescribed practical training in the field leading to a B.Tech/B.E./B.Arch. Degree, or (iii) Other professional degree (e.g. Law) involving a total of 5 years of formal University training and prescribed practical training, or (iv) Prescribed apprenticeship/article ship and pass examinations conducted by the concerned professional association (e.g. Chartered Accountancy),or (v) a University degree , followed by 2 years of formal training in a University or Service Academy (e.g. MBA/IAS/IFS). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.

Expert: A professional fulfilling the above eligibility criteria with at least 15 years of relevant experience in the field, or with an advanced degree (e.g. Ph.D.) in a concerned field and at least 10 years of relevant experience.

Age: Below 70 years. However, in the event of the non-availability of /paucity of experts in a given field, the maximum age of a member of the Expert Appraisal Committee may be allowed up to 75 years

2. The Members of the EAC shall be Experts with the requisite expertise and experience in the following fields /disciplines. In the event that persons fulfilling the criteria of “Experts” are not available, Professionals in the same field with sufficient experience may be considered:

- **Environment Quality Experts:** Experts in measurement/monitoring, analysis and interpretation of data in relation to environmental quality
- **Sectoral Experts in Project Management:** Experts in Project Management or Management of Process/Operations/Facilities in the relevant sectors.
- **Environmental Impact Assessment Process Experts:** Experts in conducting and carrying out Environmental Impact Assessments (EIAs) and preparation of Environmental Management Plans (EMPs) and other Management plans and who have wide expertise and knowledge of predictive techniques and tools used in the EIA process

- Risk Assessment Experts
 - Life Science Experts in floral and faunal management
 - Forestry and Wildlife Experts
 - Environmental Economics Expert with experience in project appraisal
3. The Membership of the EAC shall not exceed 15 (fifteen) regular Members. However the Chairperson may co-opt an expert as a Member in a relevant field for a particular meeting of the Committee.
4. The Chairperson shall be an outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector.
5. The Chairperson shall nominate one of the Members as the Vice Chairperson who shall preside over the EAC in the absence of the Chairman /Chairperson.
6. A representative of the Ministry of Environment and Forests shall assist the Committee as its Secretary.
7. The maximum tenure of a Member, including Chairperson, shall be for 2 (two) terms of 3 (three) years each.
8. The Chairman / Members may not be removed prior to expiry of the tenure without cause and proper enquiry.

A summary of various State Govt. Policies and Orders are given below

Act/Policy/Guidelines	Summary	National/ State
Land Acquisition Act, 1894	<p>It is applicable whenever it appears to the [appropriate Government] the land in any locality [is needed or] is likely to be needed for any public purpose [or for a company].</p> <p><u>Taking Possession</u> <u>Power to take possession.</u> - When the Collector has made an award under section 11, he may take possession of the land, which shall thereupon [vest absolutely in the [Government], free from all encumbrances. <u>Special powers in case of urgency.</u> – (1) In cases of urgency whenever the [appropriate Government], so directs, the Collector, though no such award has been made, may, on the expiration of fifteen days from the publication of the notice mentioned in section 9, sub-section 1). [take possession of any land needed for a public purpose]. Such land shall thereupon [vest absolutely in the [Government]], free from all encumbrances. (2) Whenever, owing to any sudden change in the channel of any navigable river or other unforeseen emergency, it becomes necessary for any Railway Administration to acquire the immediate possession of any land for the maintenance of their traffic or for the purpose of making thereon a river-side or ghat station, or of providing convenient connection with or accesses to any such station, [or the appropriate Government considers it necessary to acquire the immediate possession of any land for the purpose of maintaining any structure or system pertaining to irrigation, water supply, drainage, road communication or electricity,] the Collector may immediately after the publication of the notice mentioned in sub-section (1) and with the previous sanction of the [appropriate Government], enter upon and take possession of such land, which shall thereupon [vest absolutely in the [Government]] free from all encumbrances. (3) In every case under either of the preceding sub-sections the Collector shall at that time of taking possession offer to the persons interested compensation for the standing crops and trees (if any) on such land and from any other damage sustained by them caused by such sudden dispossession and not excepted in section 24; and, in case such offer is not accepted, the value of such crops and trees and the amount of such other damage shall be allowed for in awarding compensation for the land under the provisions herein contained.</p> <p><u>Temporary Occupation of Land</u> <u>Temporary occupation of waste or arable land.</u> Procedure when difference as to compensation exists. - (1) Subject to the provisions of Part VII of this Act, whenever it appears to the [appropriate Government] that the temporary occupation and use of any waste or arable land are needed for any public purpose, or for a Company, the [appropriate Government] may direct the Collector to procure the occupation and use of the same for such term as it shall think fit, not exceeding three years from the commencement of such occupation. (2) The Collector shall thereupon give notice in writing to the person interested in such land of the purpose for which the same is needed, and shall, for the occupation and use thereof for such term as aforesaid, and for the materials (if any) to be taken there from, pay to them such compensation, either in a gross sum of money, or by monthly or other periodical payments, as shall be agreed upon in writing between him and such persons respectively. (3) In case the Collector and the persons interested differ as to the sufficiency of the compensation or apportionment thereof, the Collector shall refer such difference to the decision of the Court.</p>	National

	<p><u>Power to enter and take possession and compensation on restoration.</u> -</p> <p>(1) On payment of such compensation, or on executing such agreement, or on making a reference under section 35, the collector may enter upon and take possession of the land, and use or permit the use thereof in accordance with the terms of the said notice.</p> <p>(2) On the expiration of the term, the Collector shall make or tender to the persons interested compensation for the damage (if any) done to the land and not provided for by the agreement, and shall restore the land to the persons interested therein:</p> <p>Provided that, if the land has become permanently unfit to be used for the purpose for which it was used immediately before the commencement of such term, and if the persons interested shall so require, the [appropriate Government] shall proceed under this Act to acquire the land as if it was needed permanently for a public purpose or for a Company.</p> <p><u>A copy of this Act is attached in Annexure 6.2A.</u></p>	
Land Acquisition (Determination of Compensation and Declaration of Award by Agreement) Rules, 1997	<p>The body or Department for which the land if being acquired may, at any stage of the proceedings settle down the terms and conditions and rates of the land under acquisition, with the land owners and appear before the Collectors and make an application indicating the terms and conditions so settled down and its readiness and willingness for determination of compensation and declaration of award in accordance with agreement. The Collector shall, if satisfied, issue notice to the persons interested in the land under acquisition to express their readiness and willingness to execute the agreement in writing, on the matters to be included in the award. <u>A copy of this rule is attached in Annexure 6.2A.</u></p>	State
National Rehabilitation and Resettlement Policy, 2007	<p>The system rehabilitation and modernization is unlikely to involve any need for land acquisition or resettlement and rehabilitation (R&R). In the rare event that this is needed, the provisions of UP State R & R Policy shall be invoked. A Resettlement Policy Framework has been prepared under this project. This National Policy is not applicable to the project. <u>A copy of this policy is attached in Annexure 6.2A.</u></p>	National
Uttar Pradesh Water Sector Resettlement and Rehabilitation Policy, 2001	<p>The Policy describes the procedures to follow, the process for land acquisition and payment of compensation, assistance provided, and guidelines for planning and implementing Rehabilitation and Resettlement, as well as the organizational structure and monitoring and post-project evaluation. <u>A copy of this policy is attached in Annexure 6.2A.</u></p>	
Government Order No. 1252/1-13-10-20 (29)/2004, 17 August 2010 laying out Uttar Pradesh Rehabilitation and Resettlement Policy	<p>The major features of 2010 Uttar Pradesh Rehabilitation and Resettlement Policy relevant to the project are</p> <ul style="list-style-type: none"> • Each of the project affected family whose entire land has been acquired for the project is entitled for one time compensation equivalent to five years of minimum agriculture wages for loss of livelihood. • Each of the project affected family whose land has been acquired partially and who has become marginal farmers due to acquisition of land in the project area are entitled for one time compensation equivalent to 500 days of minimum agriculture wages for loss of livelihood. • Each of the project affected family whose land has been acquired partially and who has become small farmers due to acquisition of land in the project area are entitled for one time compensation equivalent to 375 days of minimum agriculture wages for loss of livelihood. • Agriculture and non agriculture farmers whose land has been acquired partially due to acquisition of land in the project area are entitled for one time compensation equivalent to 625 days of minimum agriculture wages for loss of livelihood. • In addition to the above compensation, each of the project affected family which has been displaced will be given one time compensation equivalent to 250 days of minimum agriculture wages for loss of livelihood. 	State

	<ul style="list-style-type: none"> Each of the project affected family will be given housing facility in case of emergency acquisition of land under section 17 of Land Acquisition Act, 1894 till such time that the RAP is prepared & implemented. PAF will provide adequate facilities for capacity building & skill development for self employment under to start for self employment. The policy further prescribes the organizational structure for land acquisition, and related conflict resolution and its implementation. <p><u>A copy of this policy is attached in Annexure 6.2A.</u></p>	
Government Order No. 71-1/13-11-7-3(1)/90-59T.C.-1, 04 February, 2011 and Government Order No. 1666/1-13-2010-18-1(95)/10, 01 December, 2010	These Government Orders apply to the quick procedure for land acquisition. Government Order of 01 December, 2010, states that the basis for invoking this quick procedure should be supported by appropriate data and permissions. Government Order of 04 February, 2011, states that the quick procedure should be evoked under extreme emergency conditions only. <u>A copy of this policy is attached in Annexure 6.2A.</u>	State
Government Order No. 1307/1-13-10- (29)/ 2004, 03 September 2010	The Government Orders apply to Uttar Pradesh Rehabilitation and Resettlement of families affected in Land Acquisition Matters. <u>A copy of this policy is attached in Annexure 6.2A.</u>	State
Government Order No. 632/1-13-11-20(29)2004, 2 June, 2011 laying out Uttar Pradesh Land Acquisition Policy	The Government Order lays out Uttar Pradesh Land Acquisition Policy. The general policy for taking land for all purpose will be that the land be purchased directly from the land owners on the basis of mutual understanding/agreement arrived at between the land owners & the acquisition bodies by following the relevant rules/orders relating to the purchase of land. For implementation of infrastructure projects in public sector, the process of land acquisition would be initiated by following the Rules & Regulations as provided in the Land Acquisition Act 1894, but the compensation of land would be fixed by mutual consent as per the provisions of The Uttar Pradesh Land Acquisition (Determination of Compensation and Declaration of Award by Agreement) Rules, 1997 and the land owners would be given all the benefits of the Rehabilitation & Resettlement Policy 2010. <u>A copy of this policy is attached in Annexure 6.2A.</u>	State
Government Order No. 2386/12-27 –I-3-28L/12, 08 October, 2012	The Government Orders apply to land taken for various irrigation projects by mutual agreement and determine compensation.	State

Annexure 4.1- Secondary Data Tables

LGC

Table 1 : Population of SC &ST , Total Population, area and families, 1991

Block Name	Total Population					Population of SC						Population of ST					
	Total	Male	Male (%)	Female	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)
Bar	100115	53817	53.76	46298	46.24	22969	22.94	12181	53.03	10788	46.97	0	0.00	0	0.00	0	0.00
Birdha	116456	62416	53.60	54040	46.40	33886	29.10	18018	53.17	15868	46.83	339	0.29	190	56.05	149	43.95
Mahrauni	95956	51224	53.38	44732	46.62	25079	26.14	13452	53.64	11627	46.36	0	0.00	0	0.00	0	0.00
Mandawara	92148	49362	53.57	42786	46.43	26841	29.13	14327	53.38	12514	46.62	0	0.00	0	0.00	0	0.00
Total	404675	216819	53.58	187856	46.42	108775	26.88	57978	53.30	50797	46.70	339	0.08	190	56.05	149	43.95
Total District	752043	403685	53.68	348358	46.32	188927	25.12	100656	53.28	88271	46.72	349	0.05	195	55.87	154	44.13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0001>

Population of SC &ST , Total Population, area and families, 2001

Block Name	Total Population					Population of SC						Population of ST					
	Total	Male	Male (%)	Female	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)
Bar	130406	69505	53.30	60901	46.70	30377	23.29	16103	53.01	14274	46.99	0	0.00	0	0.00	0	0.00
Birdha	156121	82744	53.00	73377	47.00	45665	29.25	24046	52.66	21619	47.34	0	0.00	0	0.00	0	0.00
Mahrauni	127764	67471	52.81	60293	47.19	33642	26.33	17762	52.80	15880	47.20	0	0.00	0	0.00	0	0.00
Mandawara	118347	62801	53.07	55546	46.93	34151	28.86	18094	52.98	16057	47.02	0	0.00	0	0.00	0	0.00
Total	532638	282521	53.04	250117	46.96	143835	27.00	76005	52.84	67830	47.16	0	0.00	0	0.00	0	0.00
Total District	977734	519413	53.12	458321	46.88	243786	24.93	128821	52.84	114965	47.16	2	0.00	2	100.00	0	0.00

Block Name	% Decadal increment	
	1991-2001	2001-2011
Bar	30.25	NA
Birdha	34.06	NA
Mahrauni	33.14	NA
Mandawara	28.43	NA
Total	30.01	24.57

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab6.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 3: Block wise Population Density

Block Name	Year 1991			Year 2001		
	Area (In Sq. km.)	Total Population	Population Density	Area (In Sq. km.)	Total Population	Population Density
Bar	659.05	100115	152	659.05	130406	198
Birdha	1046.13	116456	111	1046.13	156121	149
Mahrauni	733.36	95956	131	733.36	127764	174
Mandawara	731.7	92148	126	731.7	118347	162
Total	3170.2	404675	128	3170.24	532638	168
Total District	5039	752043	149	5039	977734	194

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0001>

<http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0405>

Table 4 : Block wise Sex Ratio: Number of families per 1000 males

Block Name	YEAR 1991			YEAR 2001			Sex Ratio 2011
	Total Male	Total Female	Sex Ratio	Total Male	Total Female	Sex Ratio	
Bar	53817	46298	860	69505	60901	876	NA
Birdha	62416	54040	866	82744	73377	887	NA
Mahrauni	51224	44732	873	67471	60293	894	NA
Mandawara	49362	42786	867	62801	55546	884	NA
Total	216819	187856	866	282521	250117	885	NA
Total District	403685	348358	863	519413	458321	882	905

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0001>

<http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0405>

Table 5: Blockwise number of literate people and literacy percentage in the district

Block	Literate people 2001			Literacy percentage 2001			Gender Gap in Literacy 2001	Literacy percentage 2011			Gender Gap in Literacy 2011
	Male	Female	Total	Male	Female	Total		Male	Female	Total	
Bar	31867	12258	44125	57.6	25.63	42.78	31.97	NA	NA	NA	NA
Birdha	40977	15949	56926	62.97	28	46.65	34.97	NA	NA	NA	NA
Mahrauni	35519	15222	50741	66.28	32.36	50.43	33.92	NA	NA	NA	NA
Mandawara	29970	12654	42624	60.04	29.25	45.74	30.79	NA	NA	NA	NA
Total	138333	56083	194416	61.72	28.81	46.40	32.91	NA	NA	NA	NA
Total District	265227	119264	384491	63.81	32.97	49.46	30.84	76.41	52.26	64.96	24.15

Source :

<http://updes.up.nic.in/spatrika/engspatrika/tab15.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 6 : Blockwise Number of schools per lacs population

Block Name	Number of primary schools per lacs population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	114.9	114.9	125.9	118.9	91.3	108.9	112.7	112.7	112.7
Birdha	126.2	134	135.7	140	104.4	124.3	132.6	132.6	132.6
Mahrauni	125.1	132.4	136.5	126.1	94.7	122.1	127.6	127.6	127.6
Mandawara	141.1	141.1	144.3	138.9	108.2	120.8	127.6	127.6	127.6
Total	126.8	130.6	135.6	131.0	99.7	119.0	125.1	125.1	125.1

Block Name	Number of senior primary schools per lacs population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	35	33	37	43.9	33.7	36	47.5	47.5	47.5
Birdha	34.3	31.8	36.9	49.8	37.2	44.8	56.4	56.4	56.4
Mahrauni	26.1	36.5	38.6	46.9	35.2	38.4	54	54	54
Mandawara	29.3	32.6	42.3	53.2	41.4	47.3	62.5	62.5	62.5
Total	31.2	33.5	38.7	48.5	36.9	41.6	55.1	55.1	55.1

Block Name	Number of higher secondary schools per lacs population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	2	3	3	3	2.3	2.3	2.3	3.1	3.1
Birdha	3.4	2.6	3.4	3.4	2.6	2.6	1.9	1.9	1.9
Mahrauni	4.2	2.1	2.1	2.1	1.6	1.6	3.1	3.1	3.1

Mandawara	3.3	4.3	4.3	4.3	3.4	3.4	3.4	3.4	3.4
Total	3.2	3.0	3.2	3.2	2.5	2.5	2.7	2.9	2.9

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0102>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0304>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0506>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0708>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0910>

**Table 7: Blockwise situation of water supply in the villages of district
Blockwise 2000-01**

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	87	0	100115	0	0	87	0	0	87	0	0
Birdha	144	1	116456	0	0	145	0	0	145	0	0
Mahrauni	97	0	95956	0	0	97	0	0	97	0	0
Mandawara	122	0	92148	0	0	122	0	0	122	0	0
Total	450	1	404675	0	0	451	0	0	451	0	0
Total District	674	1	646495	0	0	675	0	0	675	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0001>

Blockwise 2001-02

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	87	0	100115	0	0	87	0	0	87	0	0
Birdha	145	0	116456	0	0	145	0	0	145	0	0
Mahrauni	97	0	95956	0	0	97	0	0	97	0	0
Mandawara	122	0	92148	0	0	122	0	0	122	0	0
Total	451	0	404675	0	0	451	0	0	451	0	0
Total District	675	0	646495	0	0	675	0	0	675	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2002-03

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	87	0	100115	0	0	87	0	0	87	0	0
Birdha	145	0	116456	0	0	145	0	0	145	0	0
Mahrauni	97	0	95956	0	0	97	0	0	97	0	0
Mandawara	122	0	92148	0	0	122	0	0	122	0	0
Total	451	0	404675	0	0	451	0	0	451	0	0
Total District	681	0	649940	0	0	681	0	0	681	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2003-04

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	87	0	100115	0	0	87	0	0	87	0	0
Birdha	145	0	116456	0	0	145	0	0	145	0	0
Mahrauni	97	0	95956	0	0	97	0	0	97	0	0
Mandawara	122	0	92148	0	0	122	0	0	122	0	0
Total	451	0	404675	0	0	451	0	0	451	0	0
Total District	681	0	649940	0	0	681	0	0	681	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2004-05

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
Source:	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0405										

Blockwise 2005-06

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
Source:	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0506										

Blockwise 2006-07

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
<i>Source:</i>	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0607										

Blockwise 2007-08

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
<i>Source:</i>	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0708										

Blockwise 2008-09

Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
<i>Source:</i>	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0809										

Blockwise 2009-10											
Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources						No. of deprived SC villages under water supply by Tap/ Hand pump India mark 2	No. of deprived villages from water supply
	Fully Covered	Partially Covered	Benefited Population	Well	General Hand pump	Hand pump India mark 2	Tap	Other	Total		
Bar	89	0	130406	0	0	89	0	0	89	0	0
Birdha	146	0	156121	0	0	146	0	0	146	0	0
Mahrauni	97	0	127764	0	0	97	0	0	97	0	0
Mandawara	122	0	118347	0	0	122	0	0	122	0	0
Total	454	0	532638	0	0	454	0	0	454	0	0
Total District	697	0	835790	0	0	697	0	0	697	0	0
Source:	http://updes.up.nic.in/spatrika/engspatrika/tab542001.asp?formd=40+Lalitpur+++++++&formy=0910										

Table 8: Length of total pakki roads per thousands sq. Km. (Km.)

Block Name	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	262.5	277.7	277.7	277.7	282.2	282.2	282.2	271.1	298.7
Birdha	272.4	282.9	282.9	282.9	285.8	285.8	282.0	261.6	294.4
Mahrauni	270.0	285.0	285.0	285.0	289.1	289.1	275.4	272.1	272.1
Mandawara	226.9	239.2	248.7	252.8	256.9	256.9	246.0	229.0	248.1
Total	258.0	271.2	273.6	274.6	278.5	278.5	271.4	258.5	278.3

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0304>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0506>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0708>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 9: Blockwise Percentage of electrified villages to total villages in population

Block Name	Percentage of electrified villages to total villages in population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	67.8	69.0	71.3	71.3	77.5	94.4	98.9	100.0	100.0
Birdha	48.3	50.3	51.0	51.7	55.5	65.8	97.3	100.0	100.0
Mahrauni	61.1	63.2	66.3	66.3	72.2	89.7	97.9	99.0	99.0
Mandawara	44.3	45.9	46.7	46.7	50.8	63.1	96.7	100.0	100.0
Total	55.4	57.1	58.8	59.0	64.0	78.3	97.7	99.8	99.8

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0102>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0304>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0506>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0708>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 10 : Blockwise no. of scheduled commercial banks and rural banks in the district
Blockwise 2000-01

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Talbehat	1	3	0
Jakhaura	3	2	1
Bar	3	2	2
Birdha	4	3	3
Total	11	10	6
Total District	23	23	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0001>

Blockwise 2001-02

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	1	3	0
Mandawara	2	4	1
Total	10	11	6
Total District	23	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2002-03

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	23	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2003-04

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	23	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2004-05

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	23	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0405>

Block wise 2005-06

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	25	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0506>

Block wise 2006-07

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	27	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise 2007-08

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	27	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2008-09

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1
Mandawara	1	3	0
Total	10	11	6
Total District	28	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2009-10

Block Name	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Bar	3	1	2
Birdha	4	3	3
Mahrauni	2	4	1

Mandawara	2	3	0
Total	11	11	6
Total District	34	20	13

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab52.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 11 : Blockwise Communication services in the district

Blockwise 2000-01

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	23
Birdha	32	0	7	315	3	34
Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	114
Total District	153	2	290	9164	9	184

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0001>

Blockwise 2001-02

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	23
Birdha	32	0	7	315	3	34
Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	114
Total District	153	2	290	9164	9	184

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2002-03

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	27
Birdha	32	0	7	315	3	38
Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	122
Total District	153	2	290	9164	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2003-04

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	27
Birdha	32	0	7	315	3	38
Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	122
Total District	153	2	290	9164	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2004-05

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	27
Birdha	32	0	7	315	3	38

Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	122
Total District	153	2	290	9164	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0405>

Blockwise 2005-06

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	120	0	27
Birdha	32	0	7	315	3	38
Mahrauni	17	0	10	190	0	36
Mandawara	22	0	3	530	0	21
Total	94	0	57	1155	3	122
Total District	153	2	290	9164	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0506>

Blockwise 2006-07

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	37	366	0	27
Birdha	32	0	7	463	3	38
Mahrauni	17	0	10	456	0	36
Mandawara	22	0	3	588	0	21
Total	94	0	57	1873	3	122
Total District	153	2	290	9683	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise 2007-08

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	6	295	0	27
Birdha	32	0	6	278	3	38
Mahrauni	17	0	26	891	0	36
Mandawara	22	0	20	693	0	21
Total	94	0	58	2157	3	122
Total District	153	2	264	8343	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2008-09

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	8	279	0	27
Birdha	32	0	12	367	3	38
Mahrauni	17	0	10	421	0	36
Mandawara	22	0	26	523	0	21
Total	94	0	56	1590	3	122
Total District	153	2	227	6685	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2009-10

Block Name	Post Office	Telegraph Office	P.C.O.	Telephone	Railway Station	Bus Stop
Bar	23	0	4	302	0	27

Birdha	32	0	3	380	3	38
Mahrauni	17	0	5	534	0	36
Mandawara	22	0	9	635	0	21
Total	94	0	21	1851	3	122
Total District	153	2	110	6632	9	193

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab51.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 12 : Number of Health facilities per lacs population

Block Name	Number of Allopathic hospitals and primary health centres per lacs population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	4.0	4.0	4.0	4.0	3.1	3.1	3.1	3.1	3.1
Birdha	4.3	4.3	4.3	4.3	3.2	3.2	3.2	3.2	3.2
Mahrauni	5.2	5.2	5.2	5.2	3.9	3.9	3.9	3.9	3.9
Mandawara	5.4	5.4	5.4	5.4	4.2	4.2	4.2	5.1	5.1
Total	4.7	4.7	4.7	4.7	3.6	3.6	3.6	3.8	3.8

Block Name	Number of beds available in Allopathic hospitals and primary health centres per lacs population								
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Bar	24.0	24.0	24.0	24.0	18.4	18.4	18.4	18.4	32.2
Birdha	24.0	24.0	24.0	24.0	17.9	17.9	17.9	17.9	12.8
Mahrauni	52.1	52.1	52.1	52.1	39.1	39.1	39.1	39.1	39.1
Mandawara	21.7	21.7	21.7	21.7	16.9	16.9	16.9	16.9	27.0
Total	30.5	30.5	30.5	30.5	23.1	23.1	23.1	23.1	27.8

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0102>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0304>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0506>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0708>
<http://updes.up.nic.in/spatrika/engspatrika/tab3.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 13: District wise Percent of Total Workers in Different Activities
District wise 1991

District Name	% of Main Workers in Different activities										Main workers	Marginal workers	No. of Total workers	% of Total Workers in total Population
	Farmers	Agricultural labourers	Animal husbandry/ forestry / tree plantation	Mining and quarrying	Household	Non-hous ehold	Construction work	Trade and commerce	Transport, storage and communication	Other workers				
Bar	64.33	5.68	0.36	0.01	1.30	0.46	0.25	1.34	0.29	1.84	75.86	24.14	45187	45.14
Birdha	54.67	8.78	0.76	3.28	0.64	0.38	0.73	1.21	0.67	1.64	72.76	27.24	51932	44.59
Mahrauni	61.59	7.00	0.60	0.02	0.67	0.52	0.33	1.41	0.28	2.67	75.10	24.90	41073	42.80
Mandawara	55.25	7.57	1.05	1.34	0.86	0.68	0.14	2.17	0.48	1.99	71.53	28.47	42207	45.80
Total	58.80	7.32	0.69	1.27	0.86	0.50	0.38	1.51	0.44	2.01	73.78	26.22	180399	44.58
Total District	55.30	8.04	0.91	0.85	1.13	1.52	1.22	3.19	1.35	4.71	78.22	21.78	314644	41.84

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab8.asp?formd=40+Lalitpur+++++++&formy=0001>

Block wise 2001

District Name	% of Main Workers in Different activities										Main workers	Marginal workers	No. of Total workers	% of Total Workers in total Population
	Farmers	Agricultural labourers	Animal husbandry/ forestry / tree plantation	Mining and quarrying	Household	Non-hous ehold	Construction work	Trade and commerce	Transport, storage and communication	Other workers				
Bar	52.99	4.69	0.00	0.00	1.76	0.00	0.00	0.00	0.00	4.18	63.62	36.38	64935	49.79
Birdha	51.39	5.02	0.00	0.00	1.23	0.00	0.00	0.00	0.00	11.32	68.96	31.04	69824	44.72

Mahrauni	47.53	3.83	0.00	0.00	0.81	0.00	0.00	0.00	0.00	5.68	57.84	42.16	58895	46.10
Mandawara	47.45	6.19	0.00	0.00	1.62	0.00	0.00	0.00	0.00	7.16	62.41	37.59	56526	47.76
Total	50.00	4.92	0.00	0.00	1.36	0.00	0.00	0.00	0.00	7.20	63.48	36.52	250180	46.97
Total District	46.96	4.94	0.00	0.00	1.97	0.00	0.00	0.00	0.00	14.59	68.46	31.54	422365	43.20

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab8.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 14: No. of families below poverty line

Name of Block	No. of families below poverty line (1997-98)	Number of families (1991)	BPL Families (%)	No. of families below poverty line (2002)	Number of families (2001)	BPL Families (%)
Bar	6143	17751	34.61	7903	21549	36.67
Birdha	7246	19885	36.44	10037	25947	38.68
Mahrauni	5151	16663	30.91	7108	21126	33.65
Mandawara	5861	16147	36.30	9527	19851	47.99
Total	24401	70446	34.64	34575	88473	39.08
Total District	49863	132370	37.67	56144	166012	33.82

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab4.asp?formd=40+Lalitpur+++++++&formy=0001> <http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0001> <http://updes.up.nic.in/spatrika/engspatrika/tab4.asp?formd=40+Lalitpur+++++++&formy=0910> <http://updes.up.nic.in/spatrika/engspatrika/tab7.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 15: Blockwise Cropping Intensity in the district (in hectares)
Blockwise 2000-01

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	53432	37312	143.2
Birdha	72915	58309	125.0
Mahrauni	54305	43946	123.6
Mandawara	46059	36851	125.0
Total	226711	176418	128.5
Total District	339692	253219	134.1

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2001-02

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	55745	38649	144.2
Birdha	74268	57345	129.5
Mahrauni	55968	44943	124.5
Mandawara	45223	36488	123.9
Total	231204	177425	130.3
Total District	341544	255221	133.8

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2002-03

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	51841	35693	145.2
Birdha	70363	54388	129.4
Mahrauni	52061	41984	124.0
Mandawara	41318	33531	123.2
Total	215583	165596	130.2
Total District	318114	237480	134.0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2003-04

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	59376	40071	148.2
Birdha	89307	60650	147.2
Mahrauni	64965	47175	137.7
Mandawara	49187	37952	129.6
Total	262835	185848	141.4
Total District	385426	265712	145.1

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0405>

Blockwise 2004-05

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	65369	42669	153.2
Birdha	89246	61992	144.0
Mahrauni	66940	51621	129.7
Mandawara	51624	39142	131.9
Total	273179	195424	139.8
Total District	401115	277994	144.3

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0506>

Blockwise 2005-06

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	63289	43025	147.1
Birdha	74442	61490	121.1
Mahrauni	55178	46058	119.8
Mandawara	44002	32402	135.8
Total	236911	182975	129.5
Total District	362209	267863	135.2

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise 2006-07

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	61127	40208	152.0
Birdha	83384	62517	133.4
Mahrauni	56439	47198	119.6
Mandawara	44513	33435	133.1
Total	245463	183358	133.9
Total District	377348	270273	139.6

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2007-08

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	41577	35622	116.7
Birdha	85651	57606	148.7
Mahrauni	58927	47010	125.3
Mandawara	47261	37027	127.6
Total Rural	348214	254766	136.7
Total	540053	396409	136.2
Total District	348214	254766	136.7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2008-09

Block Name	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Bar	75013	44165	169.8
Birdha	92133	61553	149.7

Mahrauni	73977	52346	141.3
Mandawara	55019	39898	137.9
Total	296142	197962	149.6
Total District	438560	285426	153.7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0910>

Blockwise 2002-03

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1349	0	0	0	1349	0	12614	12174	1496	1493
Birdha	499	0	0	0	499	0	13481	12285	409	384
Mahrauni	945	0	0	0	945	0	9216	9012	468	464
Mandawara	993	0	0	0	993	0	7156	7147	249	249
Total	3786	0	0	0	3786	0	42467	40618	2622	2590
Total District	5529	0	0	0	5529	0	76896	72814	4546	4455

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
84	0	0	0	5708	0	0	0	5708	0	0	0
679	0	0	0	1604	0	0	0	1604	0	0	0
1718	0	0	0	611	0	0	0	611	0	0	0
1132	0	1	0	742	0	0	0	742	0	0	0
3613	0	1	0	8665	0	0	0	8665	0	0	0
3827	0	1	0	23535	0	0	0	23535	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
53	0	0	0	53	0	90	0	0	0	5	0
11	0	0	0	11	0	83	0	0	0	0	0
19	0	0	0	19	0	187	0	0	0	4	0
32	0	0	0	32	0	264	0	5	0	13	0
115	0	0	0	115	0	624	0	5	0	22	0
153	0	0	0	153	0	735	0	5	0	31	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
21399	13667	14450	0	0	0	14450	0	248	0	40	40
16766	12669	3457	0	47	47	3504	47	458	0	12	12
13168	9476	17612	0	22	22	17634	22	603	0	0	0
10587	7396	11961	5	0	0	11961	5	107	1	0	0
61920	43208	47480	5	69	69	47549	74	1416	1	52	52
115258	77269	77509	5	69	69	77578	74	2501	1	105	105

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
288	40	2110	2068	3906	3424	6570	6283	1	0	0	0
470	12	7672	5764	15589	13141	6079	5601	1	0	0	0
603	0	5686	5286	6725	6650	9097	8870	62	0	0	0
107	1	4488	3484	9785	7454	6091	5233	16	0	0	0
1468	53	19956	16602	36005	30669	27837	25987	80	0	0	0

2606	106	22328	18674	48548	40542	35460	33465	80	0	0	0
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Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27325	11815	48724	25482	152	137	15	0	731	0	0	0
33315	24565	50081	37234	26	15	10	4	480	0	0	0
39807	20828	52975	30304	32	30	28	5	98	0	0	0
32448	16177	43035	23573	23	17	56	0	145	0	0	0
132895	73385	194815	116593	233	199	109	9	1454	0	0	0
186600	92861	301858	170130	329	287	122	12	2591	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1038	0	0	0	1092	0	3028	137	22	22	25	25
288	0	0	0	526	0	1330	19	10	10	114	114
49	0	0	0	547	0	754	35	2	2	21	21
71	0	0	0	555	0	850	17	20	20	20	20
1446	0	0	0	2720	0	5962	208	54	54	180	180
6230	1	8	3	3799	22	13079	325	126	126	297	297

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
7	7	328	220	0	0	0	0	0	0	0	0
10	10	60	40	0	0	0	0	0	0	0	0
5	5	510	425	0	0	0	0	0	0	0	0
5	5	40	30	0	0	0	0	0	0	0	0
27	27	938	715	0	0	0	0	0	0	0	0
61	61	1875	1438	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	4	4	0	0	1	1
0	0	3	3	0	0	0	0
0	0	22	22	15	0	0	0
0	0	32	32	0	0	0	0
0	0	61	61	15	0	1	1
1	0	107	107	19	1	7	7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur++++&formy=0102>

Blockwise 2001-02

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1538	0	0	0	1538	0	14608	14563	1910	1905
Birdha	623	0	0	0	623	0	18473	14674	617	532
Mahrauni	1248	0	0	0	1248	0	12208	11401	469	455
Mandawara	1108	0	0	0	1108	0	12148	9536	250	195
Total	4517	0	0	0	4517	0	57437	50174	3246	3087
Total District	7435	2	0	0	7435	2	94847	87148	5791	5588

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
90	0	3	0	6143	0	0	0	6143	0	0	0
1129	0	0	0	2044	0	0	0	2044	0	0	0
2168	0	48	0	831	0	0	0	831	0	0	0
1349	0	117	0	968	0	0	0	968	0	0	0
4736	0	168	0	9986	0	0	0	9986	0	0	0
4955	0	168	0	26176	0	1	1	26177	1	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
80	0	0	0	80	0	177	0	0	0	13	0
13	0	0	0	13	0	103	0	0	0	0	0
38	0	0	0	38	0	289	0	0	0	13	0
29	0	0	0	29	0	332	0	0	0	38	0
160	0	0	0	160	0	901	0	0	0	64	0
206	0	0	0	206	0	1068	0	0	0	64	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
24562	16468	10418	0	0	0	10418	0	500	0	49	49
23002	15206	15537	0	0	0	15537	0	482	0	207	207
17312	11856	5051	0	165	165	5216	165	842	0	0	0
16339	9731	5068	0	50	50	5118	50	357	0	0	0
81215	53261	36074	0	215	215	36289	215	2181	0	256	256
140711	92739	55956	0	215	215	56171	215	4364	0	377	377

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
549	49	3090	2678	4042	3643	6225	5692	0	0	0	0
689	207	10978	7669	15726	10154	5733	5110	0	0	0	0
842	0	10516	9736	6864	5260	8751	8379	32	0	0	0
357	0	5124	3912	9922	6049	5745	4742	6	0	0	0
2437	256	29708	23995	36554	25106	26454	23923	38	0	0	0
4741	377	33202	27073	49369	36001	33387	30518	38	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
24324	12062	48886	28530	184	86	6	0	948	0	0	0
48663	23140	71665	38346	25	4	78	2	640	0	0	0
32221	23540	49533	35396	48	15	206	0	238	0	0	0
26272	14753	42611	24484	56	15	248	1	162	0	0	0
131480	73495	212695	126756	313	120	538	3	1988	0	0	0
176908	94184	317619	186923	427	220	601	4	3492	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1031	0	0	0	1773	0	3942	86	40	40	17	17
101	0	0	0	175	0	1019	6	10	10	101	101
53	0	0	0	2301	0	2846	15	9	9	11	11
97	0	0	0	1863	0	2426	16	27	27	10	10
1282	0	0	0	6112	0	10233	123	86	86	139	139
8164	0	40	4	7766	0	20490	228	170	170	315	315

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	4	4	0	0	1	1
0	0	3	3	0	0	0	0
0	0	21	21	11	0	0	0
0	0	30	30	0	0	0	0
0	0	58	58	11	0	1	1
1	1	101	101	13	0	13	13

Source:

<http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2002-03

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1349	0	0	0	1349	0	12614	12174	1496	1493
Birdha	499	0	0	0	499	0	13481	12285	409	384
Mahrauni	945	0	0	0	945	0	9216	9012	468	464
Mandawara	993	0	0	0	993	0	7156	7147	249	249
Total	3786	0	0	0	3786	0	42467	40618	2622	2590
Total District	5529	0	0	0	5529	0	76896	72814	4546	4455

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
84	0	0	0	5708	0	0	0	5708	0	0	0
679	0	0	0	1604	0	0	0	1604	0	0	0
1718	0	0	0	611	0	0	0	611	0	0	0
1132	0	1	0	742	0	0	0	742	0	0	0
3613	0	1	0	8665	0	0	0	8665	0	0	0
3827	0	1	0	23535	0	0	0	23535	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
53	0	0	0	53	0	90	0	0	0	5	0
11	0	0	0	11	0	83	0	0	0	0	0
19	0	0	0	19	0	187	0	0	0	4	0
32	0	0	0	32	0	264	0	5	0	13	0
115	0	0	0	115	0	624	0	5	0	22	0
153	0	0	0	153	0	735	0	5	0	31	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
21399	13667	14450	0	0	0	14450	0	248	0	40	40
16766	12669	3457	0	47	47	3504	47	458	0	12	12
13168	9476	17612	0	22	22	17634	22	603	0	0	0
10587	7396	11961	5	0	0	11961	5	107	1	0	0
61920	43208	47480	5	69	69	47549	74	1416	1	52	52
115258	77269	77509	5	69	69	77578	74	2501	1	105	105

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
288	40	2110	2068	3906	3424	6570	6283	1	0	0	0
470	12	7672	5764	15589	13141	6079	5601	1	0	0	0
603	0	5686	5286	6725	6650	9097	8870	62	0	0	0
107	1	4488	3484	9785	7454	6091	5233	16	0	0	0
1468	53	19956	16602	36005	30669	27837	25987	80	0	0	0
2606	106	22328	18674	48548	40542	35460	33465	80	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27325	11815	48724	25482	152	137	15	0	731	0	0	0
33315	24565	50081	37234	26	15	10	4	480	0	0	0
39807	20828	52975	30304	32	30	28	5	98	0	0	0
32448	16177	43035	23573	23	17	56	0	145	0	0	0
132895	73385	194815	116593	233	199	109	9	1454	0	0	0
186600	92861	301858	170130	329	287	122	12	2591	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated

1038	0	0	0	1092	0	3028	137	22	22	25	25
288	0	0	0	526	0	1330	19	10	10	114	114
49	0	0	0	547	0	754	35	2	2	21	21
71	0	0	0	555	0	850	17	20	20	20	20
1446	0	0	0	2720	0	5962	208	54	54	180	180
6230	1	8	3	3799	22	13079	325	126	126	297	297

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
7	7	328	220	0	0	0	0	0	0	0	0
10	10	60	40	0	0	0	0	0	0	0	0
5	5	510	425	0	0	0	0	0	0	0	0
5	5	40	30	0	0	0	0	0	0	0	0
27	27	938	715	0	0	0	0	0	0	0	0
61	61	1875	1438	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	4	4	0	0	1	1
0	0	3	3	0	0	0	0
0	0	22	22	15	0	0	0
0	0	32	32	0	0	0	0
0	0	61	61	15	0	1	1
1	0	107	107	19	1	7	7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2002-03

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1349	0	0	0	1349	0	12614	12174	1496	1493
Birdha	499	0	0	0	499	0	13481	12285	409	384
Mahrauni	945	0	0	0	945	0	9216	9012	468	464
Mandawara	993	0	0	0	993	0	7156	7147	249	249
Total	3786	0	0	0	3786	0	42467	40618	2622	2590
Total District	5529	0	0	0	5529	0	76896	72814	4546	4455

Jwar	Millet	Maize kharif	Maize jayad	Total Maize	Marhuva
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Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
84	0	0	0	5708	0	0	0	5708	0	0	0
679	0	0	0	1604	0	0	0	1604	0	0	0
1718	0	0	0	611	0	0	0	611	0	0	0
1132	0	1	0	742	0	0	0	742	0	0	0
3613	0	1	0	8665	0	0	0	8665	0	0	0
3827	0	1	0	23535	0	0	0	23535	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
53	0	0	0	53	0	90	0	0	0	5	0
11	0	0	0	11	0	83	0	0	0	0	0
19	0	0	0	19	0	187	0	0	0	4	0
32	0	0	0	32	0	264	0	5	0	13	0
115	0	0	0	115	0	624	0	5	0	22	0
153	0	0	0	153	0	735	0	5	0	31	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
21399	13667	14450	0	0	0	14450	0	248	0	40	40
16766	12669	3457	0	47	47	3504	47	458	0	12	12
13168	9476	17612	0	22	22	17634	22	603	0	0	0
10587	7396	11961	5	0	0	11961	5	107	1	0	0
61920	43208	47480	5	69	69	47549	74	1416	1	52	52
115258	77269	77509	5	69	69	77578	74	2501	1	105	105

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
288	40	2110	2068	3906	3424	6570	6283	1	0	0	0
470	12	7672	5764	15589	13141	6079	5601	1	0	0	0
603	0	5686	5286	6725	6650	9097	8870	62	0	0	0
107	1	4488	3484	9785	7454	6091	5233	16	0	0	0
1468	53	19956	16602	36005	30669	27837	25987	80	0	0	0
2606	106	22328	18674	48548	40542	35460	33465	80	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27325	11815	48724	25482	152	137	15	0	731	0	0	0
33315	24565	50081	37234	26	15	10	4	480	0	0	0
39807	20828	52975	30304	32	30	28	5	98	0	0	0
32448	16177	43035	23573	23	17	56	0	145	0	0	0
132895	73385	194815	116593	233	199	109	9	1454	0	0	0
186600	92861	301858	170130	329	287	122	12	2591	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1038	0	0	0	1092	0	3028	137	22	22	25	25
288	0	0	0	526	0	1330	19	10	10	114	114
49	0	0	0	547	0	754	35	2	2	21	21
71	0	0	0	555	0	850	17	20	20	20	20
1446	0	0	0	2720	0	5962	208	54	54	180	180
6230	1	8	3	3799	22	13079	325	126	126	297	297

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
7	7	328	220	0	0	0	0	0	0	0	0
10	10	60	40	0	0	0	0	0	0	0	0
5	5	510	425	0	0	0	0	0	0	0	0
5	5	40	30	0	0	0	0	0	0	0	0
27	27	938	715	0	0	0	0	0	0	0	0
61	61	1875	1438	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	4	4	0	0	1	1
0	0	3	3	0	0	0	0
0	0	22	22	15	0	0	0
0	0	32	32	0	0	0	0
0	0	61	61	15	0	1	1
1	0	107	107	19	1	7	7

Blockwise 2003-04

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1488	0	0	0	1488	0	15897	15897	1850	1844
Birdha	428	0	0	0	428	0	20618	18773	579	553
Mahrauni	920	0	0	0	920	0	15283	14690	517	479
Mandawara	931	0	0	0	931	0	10766	9567	304	265
Total	3767	0	0	0	3767	0	62564	58927	3250	3141
Total District	6004	0	0	0	6004	0	98336	94612	5842	5728

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
486	0	0	0	6945	0	0	0	6945	0	0	0
2118	0	0	0	4616	0	0	0	4616	0	0	0
1560	0	0	0	1047	0	0	0	1047	0	0	0
1919	0	1	0	1260	0	0	0	1260	0	0	0
6083	0	1	0	13868	0	0	0	13868	0	0	0
7541	0	1	0	28856	0	0	0	28856	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
92	0	0	0	92	0	129	0	0	0	4	0
5	0	0	0	5	0	0	0	0	0	0	0
26	0	0	0	26	0	172	0	0	0	4	0
48	0	1	1	49	1	297	0	5	0	39	0
171	0	1	1	172	1	598	0	5	0	47	0
209	0	1	1	210	1	721	0	5	0	47	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
26891	17741	13457	0	0	0	13457	0	536	0	10	10
28364	19326	27142	0	30	30	27172	30	586	0	58	58
19529	15169	16682	0	1	1	16683	1	788	0	9	9
15571	9833	10761	0	0	0	10761	0	402	0	61	61
90355	62069	68042	0	31	31	68073	31	2312	0	138	138
147563	100341	97702	0	31	31	97733	31	3841	0	307	307

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
546	10	2110	2098	4694	4671	8768	8713	11	0	0	0
644	58	7535	5797	17207	14388	7915	7657	0	0	0	0
797	9	5618	5316	9483	8678	12354	12126	0	0	0	0
463	61	4418	3514	5301	2942	6936	6174	16	0	0	0
2450	138	19681	16725	36685	30679	35973	34670	27	0	0	0
4148	307	21916	18856	49561	43046	45721	44225	27	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
29586	15492	56477	33233	380	377	12	0	1019	0	0	0
60473	27930	88837	47256	26	25	7	0	482	0	0	0
44935	26130	64464	41299	84	69	26	8	353	0	0	0
27895	12691	43466	22524	40	19	54	5	239	0	0	0
162889	82243	253244	144312	530	490	99	13	2093	0	0	0
219106	106465	366669	206806	682	636	108	22	3869	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
717	0	0	0	1104	0	3232	377	20	20	37	37
99	0	3	0	147	0	764	25	1	1	151	151
43	0	0	0	415	0	921	77	1	1	28	28
68	0	6	1	842	0	1249	25	5	5	20	20
927	0	9	1	2508	0	6166	504	27	27	236	236
6702	0	9	1	3514	0	14884	659	93	93	422	422

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
7	7	309	244	0	0	0	0	0	0	0	0
6	6	381	302	0	0	0	0	0	0	0	0
15	15	148	143	0	0	0	0	0	0	0	0
7	7	143	106	0	0	0	0	0	0	0	0
35	35	981	795	0	0	0	0	0	0	0	0
99	99	2354	1718	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0

Blockwise 2004-05

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1335	0	0	0	1335	0	16140	16140	1403	1399
Birdha	497	0	0	0	497	0	18781	16979	626	604
Mahrauni	926	0	0	0	926	0	14539	14022	521	483
Mandawara	994	0	0	0	994	0	10652	9432	233	225
Total	3752	0	0	0	3752	0	60112	56573	2783	2711
Total District	5668	0	0	0	5668	0	95863	92235	5257	5176

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
441	0	0	0	7688	0	0	0	7688	0	0	0
1349	0	0	0	6071	0	0	0	6071	0	0	0
1331	0	0	0	1205	0	0	0	1205	0	0	0
1989	0	0	0	1478	0	0	0	1478	0	0	0
5110	0	0	0	16442	0	0	0	16442	0	0	0
5342	0	0	0	33374	0	0	0	33374	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
76	0	0	0	76	0	96	0	0	0	0	0
2	0	0	0	2	0	25	0	0	0	0	0
21	0	0	0	21	0	169	0	0	0	0	0
35	0	0	0	35	0	294	0	0	0	0	0
134	0	0	0	134	0	584	0	0	0	0	0
195	0	1	1	196	1	1161	0	0	0	0	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27179	17539	13235	0	1	1	13236	1	521	0	7	7
27351	17583	21142	0	0	0	21142	0	731	0	26	26
18712	14505	16297	0	0	0	16297	0	876	0	4	4
15675	9657	10547	0	0	0	10547	0	380	0	55	55
88917	59284	61221	0	1	1	61222	1	2508	0	92	92
146861	97412	88620	0	3	3	88623	3	4139	0	129	129

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
528	7	2415	2357	3559	3539	11675	11589	1	0	0	0
757	26	13379	10780	12621	10781	10572	10360	1	0	0	0
880	4	7465	7177	8159	7442	12982	12750	0	0	0	0
435	55	5836	4923	8046	6462	8778	8178	20	0	0	0
2600	92	29095	25237	32385	28224	44007	42877	22	0	0	0
4268	129	33321	29303	41570	37095	58020	56674	22	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
31414	17493	58593	35032	1569	1530	15	0	2098	0	0	0
58472	31947	85823	49530	146	140	14	1	1926	0	0	0
45783	27373	64495	41878	254	170	40	8	870	0	0	0
33662	19618	49337	29275	104	57	133	2	464	0	0	0
169331	96431	258248	155715	2073	1897	202	11	5358	0	0	0
225824	123204	372685	220616	2948	2685	232	37	8130	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
870	0	0	0	1733	0	6285	1530	14	14	45	45
120	0	0	0	727	0	2933	141	0	0	88	88
49	0	0	0	690	0	1903	178	2	2	69	69
71	0	0	0	1197	0	1969	59	16	16	18	18
1110	0	0	0	4347	0	13090	1908	32	32	220	220
6933	0	6	1	5968	0	24217	2723	104	104	391	391

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
5	5	289	235	0	0	0	0	0	0	2	0
3	3	350	273	0	0	0	0	0	0	1	0
34	34	271	271	0	0	0	0	0	0	0	0
3	3	124	96	0	0	0	0	0	0	3	0
45	45	1034	875	0	0	0	0	0	0	6	0
115	115	2623	2052	0	0	0	0	0	0	30	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
2	1	13	13	3	0	0	0
0	0	2	2	0	0	0	0
0	0	58	58	23	0	0	0
0	0	0	0	0	0	0	0
2	1	73	73	26	0	0	0
6	4	121	121	54	0	1	1

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++&formy=0506>

Blockwise 2005-06

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1102	0	0	0	1102	0	18269	18269	1859	1859
Birdha	257	0	0	0	257	0	17343	16600	744	726
Mahrauni	416	0	0	0	416	0	14390	13294	387	384
Mandawara	456	0	0	0	456	0	9914	9021	302	296
Total	2231	0	0	0	2231	0	59916	57184	3292	3265
Total District	4017	0	0	0	4017	0	97723	94923	6287	6253

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
175	0	0	0	6491	0	0	0	6491	0	0	0
164	0	1	0	3411	0	0	0	3411	0	0	0
307	0	0	0	687	0	0	0	687	0	0	0
559	0	0	0	1189	0	0	0	1189	0	0	0
1205	0	1	0	11778	0	0	0	11778	0	0	0
1258	0	1	0	28089	0	0	0	28089	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
54	0	0	0	54	0	75	0	0	0	0	0
5	0	0	0	5	0	9	0	0	0	0	0
12	0	0	0	12	0	50	0	0	0	0	0
8	0	0	0	8	0	127	0	0	0	0	0
79	0	0	0	79	0	261	0	0	0	0	0
112	0	0	0	112	0	322	0	0	0	0	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
28025	20128	10610	0	12	12	10622	12	450	0	61	61
21934	17326	9395	0	4	4	9399	4	463	0	4	4
16249	13678	6327	0	2	2	6329	2	307	0	8	8
12555	9317	5833	0	0	0	5833	0	190	0	0	0
78763	60449	32165	0	18	18	32183	18	1410	0	73	73
137809	101176	53162	0	20	20	53182	20	2411	0	245	245

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
511	61	2485	2477	3048	3039	5815	5809	0	0	0	0
467	4	17066	14506	9846	8976	13873	13363	0	0	0	0
315	8	9708	9029	5252	4498	16435	16028	0	0	0	0
190	0	6096	5117	6216	5236	17410	16709	8	0	0	0
1483	73	35355	31129	24362	21749	53533	51909	8	0	0	0
2656	245	40753	36347	31563	28690	71177	69334	8	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
22481	11398	50506	31526	1924	1918	36	24	1884	0	0	0
50651	36853	72585	54179	243	222	26	4	752	0	0	0
38039	29565	54288	43243	85	81	19	5	299	0	0	0
35753	27062	48308	36379	122	80	63	3	298	0	0	0
146924	104878	225687	165327	2374	2301	144	36	3233	0	0	0
199339	134636	337148	235812	3507	3367	181	58	5446	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1095	0	0	0	1310	0	6249	1942	12	12	51	51
194	0	0	0	248	0	1463	226	0	0	77	77
5	0	0	0	261	0	669	86	5	5	58	58
43	0	0	0	797	0	1323	83	9	9	23	23
1337	0	0	0	2616	0	9704	2337	26	26	209	209
8203	0	0	0	3695	0	21032	3425	107	107	403	403

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
6	6	350	280	0	0	0	0	0	0	3	0
8	8	361	290	0	0	0	0	0	0	0	0
30	30	235	203	0	0	0	0	0	0	5	0
5	5	101	91	0	0	0	0	0	0	2	0
49	49	1047	864	0	0	0	0	0	0	10	0
146	146	2708	2177	0	0	0	0	0	0	12	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	21	21	15	2	0	0
0	0	3	3	0	0	0	0
0	0	61	61	23	6	0	0
0	0	4	4	3	0	0	0
0	0	89	89	41	8	0	0
2	2	143	143	70	17	1	1

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur++++&formy=0607>

Blockwise 2006-07

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	926	0	0	0	926	0	16551	16545	2182	2182
Birdha	299	0	0	0	299	0	17983	17373	703	693
Mahrauni	304	0	0	0	304	0	15071	14153	455	449
Mandawara	389	0	0	0	389	0	10252	9598	314	311
Total	1918	0	0	0	1918	0	59857	57669	3654	3635
Total District	3704	1	5	5	3709	6	100875	98613	6904	6883

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
207	0	0	0	7261	0	0	0	7261	0	0	0
209	0	0	0	5625	0	0	0	5625	0	0	0
320	0	0	0	652	0	0	0	652	0	0	0
653	0	0	0	1125	0	0	0	1125	0	0	0
1389	0	0	0	14663	0	0	0	14663	0	0	0
1430	0	0	0	33200	0	1	1	33201	1	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
52	0	0	0	52	0	46	0	0	0	0	0
3	0	0	0	3	0	12	0	0	0	0	0
17	0	0	0	17	0	54	0	0	0	0	0
19	0	0	0	19	0	141	0	0	0	0	0
91	0	0	0	91	0	253	0	0	0	0	0
127	0	0	0	127	0	278	0	0	0	0	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27225	18727	10996	0	50	50	11046	50	468	0	71	71
24834	18066	13816	0	12	12	13828	12	640	0	7	7
16873	14602	5851	0	0	0	5851	0	342	0	1	1
12893	9909	5591	0	3	3	5594	3	213	0	10	10
81825	61304	36254	0	65	65	36319	65	1663	0	89	89
146524	105503	58880	0	162	162	59042	162	2891	0	186	186

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
539	71	2395	2371	2688	2684	10353	10338	0	0	0	0
647	7	16249	13913	9061	8476	15635	15453	10	0	0	0
343	1	9805	9093	5530	5080	16863	16318	0	0	0	0
223	10	5988	5243	6312	5319	11982	11458	0	0	0	0
1752	89	34437	30620	23591	21559	54833	53567	10	0	0	0
3077	186	39911	36002	30272	28135	69903	68580	15	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
27021	15514	54246	34241	1471	1469	3	3	2203	0	0	0
55430	37861	80264	55927	110	107	19	5	1559	0	0	0
38392	30492	55265	45094	150	112	21	4	299	0	0	0
30099	22033	42992	31942	88	25	35	5	311	0	0	0
150942	105900	232767	167204	1819	1713	78	17	4372	0	0	0
202220	133065	348744	238568	2993	2866	83	21	7632	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1362	0	0	0	1252	0	6291	1472	16	16	45	45
226	0	0	0	682	0	2596	112	3	3	86	86
8	0	0	0	256	0	734	116	13	13	54	54
47	0	0	0	786	0	1267	30	15	15	19	19
1643	0	0	0	2976	0	10888	1730	47	47	204	204
9282	13	5	0	4240	0	24235	2900	169	169	391	391

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
13	13	346	281	0	0	0	0	0	0	6	0
4	4	380	300	0	0	0	0	0	0	0	0
29	29	229	189	0	0	0	0	0	0	7	0
7	7	123	107	0	0	0	0	0	0	4	0
53	53	1078	877	0	0	0	0	0	0	17	0
136	136	2845	2266	0	0	0	0	0	0	22	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	24	24	0	0	0	0
2	2	3	3	0	0	0	0
0	0	86	86	56	0	0	0
0	0	2	2	0	0	0	0
2	2	115	115	56	0	0	0
2	2	160	160	56	0	2	2

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2007-08

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	1002	0	0	0	1002	0	4630	4630	395	395
Birdha	346	0	0	0	346	0	15944	15548	564	553
Mahrauni	329	0	0	0	329	0	12114	12110	510	507
Mandawara	329	0	0	0	329	0	8554	8239	274	263
Total	2006	0	0	0	2006	0	41242	40527	1743	1718
Total District	3344	0	0	0	3344	0	66762	65865	3866	3841

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
493	0	0	0	9415	0	0	0	9415	0	0	0
378	0	0	0	6839	0	0	0	6839	0	0	0
1526	0	0	0	1282	0	0	0	1282	0	0	0
930	0	85	0	1811	0	0	0	1811	0	0	0
3327	0	85	0	19347	0	0	0	19347	0	0	0
3373	0	85	0	39769	0	0	0	39769	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
40	0	0	0	40	0	77	0	0	0	0	0
4	0	0	0	4	0	13	0	0	0	0	0
7	0	0	0	7	0	52	0	0	0	0	0
14	0	0	0	14	0	150	0	0	0	0	0
65	0	0	0	65	0	292	0	0	0	0	0
103	0	0	0	103	0	342	0	0	0	0	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
16052	5025	15788	0	0	0	15788	0	542	0	2	2
24088	16101	26589	0	1	1	26590	1	829	0	1	1
15820	12617	16584	0	0	0	16584	0	652	0	0	0
12147	8502	11812	0	2	2	11814	2	629	0	0	0
68107	42245	70773	0	3	3	70776	3	2652	0	3	3
117644	69706	100991	0	5	5	100996	5	3874	0	6	6

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
544	2	261	261	268	268	1127	1127	0	0	0	0
830	1	11280	9491	7972	7356	12087	11755	0	0	0	0
652	0	5557	5481	6031	5974	11357	11322	0	0	0	0
629	0	4845	4621	4733	4358	10349	9974	54	0	0	0
2655	3	21943	19854	19004	17956	34920	34178	54	0	0	0
3880	6	25364	23157	23513	22282	45205	44284	54	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
17988	1658	34040	6683	172	172	0	0	3915	0	0	0
58759	28604	82847	44705	47	29	5	0	1460	0	0	0
40181	22777	56001	35394	115	108	23	9	759	0	0	0
32424	18955	44571	27457	35	19	7	0	849	0	0	0
149352	71994	217459	114239	369	328	35	9	6983	0	0	0
199012	89734	316656	159440	952	911	43	11	10789	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1310	0	0	0	1653	0	7050	172	26	26	18	18
221	0	0	0	721	0	2454	29	1	1	37	37
161	0	25	0	1313	0	2396	117	30	30	31	31
85	0	0	0	1539	0	2515	19	4	4	9	9
1777	0	25	0	5226	0	14415	337	61	61	95	95
9318	0	25	0	6671	0	27798	922	183	182	214	214

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
4	4	205	129	0	0	0	0	0	0	0	0
4	4	270	154	0	0	0	0	0	0	0	0
31	31	291	174	0	0	0	0	0	0	0	0
9	9	95	78	0	0	0	0	0	0	0	0
48	48	861	535	0	0	0	0	0	0	0	0
97	97	2298	1734	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	3	3	0	0	0	0
5	4	1	1	0	0	1	1
0	0	108	108	0	0	0	0
0	0	0	0	0	0	0	0
5	4	112	112	0	0	1	1
5	4	133	133	0	0	1	1

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2008-09

Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley	
	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Bar	871	0	0	0	871	0	20277	20273	2497	2497
Birdha	285	0	0	0	285	0	19694	19297	767	754
Mahrauni	290	0	0	0	290	0	15918	15908	741	741
Mandawara	405	0	0	0	405	0	10838	10643	414	405
Total	1851	0	0	0	1851	0	66727	66121	4419	4397
Total District	3503	0	0	0	3503	0	110609	109997	8091	8069

Jwar		Millet		Maize kharif		Maize jayad		Total Maize		Marhuva	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
551	0	0	0	9738	0	0	0	9738	0	0	0
164	0	0	0	5634	0	0	0	5634	0	0	0
2292	0	0	0	1530	0	0	0	1530	0	0	0
1185	0	0	0	2019	0	0	0	2019	0	0	0
4192	0	0	0	18921	0	0	0	18921	0	0	0
4223	0	0	0	39140	0	0	0	39140	0	0	0

Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
32	0	0	0	32	0	48	0	0	0	0	0
1	0	0	0	1	0	13	0	0	0	0	0
12	0	0	0	12	0	32	0	0	0	0	0
35	0	0	0	35	0	128	0	0	0	0	0
80	0	0	0	80	0	221	0	0	0	0	0
119	0	0	0	119	0	251	0	0	0	0	0

Total dhaan		Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
34014	22770	15842	0	21	21	15863	21	844	0	36	36
26558	20051	23787	0	16	16	23803	16	674	0	20	20
20815	16649	20143	0	0	0	20143	0	591	0	0	0
15024	11048	12959	0	13	13	12972	13	577	0	5	5
96411	70518	72731	0	50	50	72781	50	2686	0	61	61
165936	118066	102655	0	116	116	102771	116	3910	0	261	261

Total moong		Masur		Gram		Pea		Arhar		Moth	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
880	36	1870	1825	2795	2795	9337	9316	1	0	0	0
694	20	11906	10340	7183	6678	18424	18168	23	0	0	0
591	0	5924	5923	6667	6667	16078	16078	0	0	0	0
582	5	4745	4530	6248	5764	12503	12306	14	0	0	0
2747	61	24445	22618	22893	21904	56342	55868	38	0	0	0
4171	261	28596	26730	28773	27742	70733	70243	38	0	0	0

Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
30746	13993	64760	36763	2240	2239	2	0	3587	0	0	0
62033	35222	88591	55273	72	60	0	0	1099	0	0	0
49403	28668	70218	45317	240	237	6	6	979	0	0	0
37064	22618	52088	33666	190	130	0	0	652	0	0	0
179246	100501	275657	171019	2742	2666	8	6	6317	0	0	0
235082	125092	401018	243158	4255	4179	28	23	9846	0	0	0

Groundnut		Sunflower		Soyabean		Total oilseeds		Sugarcane		Potato	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
1513	0	0	0	2196	0	9538	2239	27	27	70	70
166	0	0	0	1504	0	2841	60	3	3	92	92
26	0	0	0	1982	0	3233	243	23	23	42	42
55	0	0	0	1829	0	2726	130	9	9	14	14
1760	0	0	0	7511	0	18338	2672	62	62	218	218
9762	0	50	0	8789	0	32730	4202	143	140	435	435

Onion		Other vegetables		Tobacco		Jute		Cotton		Sanai	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
78	78	458	391	0	0	0	0	0	0	0	0
1	1	420	322	0	0	0	0	0	0	0	0
22	22	292	188	0	0	0	0	0	0	0	0
7	7	134	90	0	0	0	0	0	0	0	0
108	108	1304	991	0	0	0	0	0	0	0	0
185	185	3128	2529	0	0	0	0	0	0	0	0

Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
0	0	6	6	0	0	0	0
4	2	9	9	0	0	0	0
0	0	48	48	105	105	0	0
0	0	0	0	0	0	0	0
4	2	63	63	105	105	0	0
4	2	94	94	105	105	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab19.asp?formd=40+Lalitpur+++++&formy=0910>

Table 17: Average production of main crops (quintal/hectare) in the district

Name of crops	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Rice									
Kharif	9.79	7.05	1.11	6.45	3.89	6.17	7.11	2.55	7.42
Jayad	0	0	0	0	0	0	7.11	0	0
Total Rice	9.79	7.05	1.11	6.45	3.89	6.17	7.11	2.55	7.42
Wheat	16.08	18.19	16.45	20.2	19.93	16.24	18.58	15.62	21.49
Barley	11.74	16.22	14.85	16.08	13.14	19.26	18.91	12.61	18.87
Jwar	6.41	9.42	6.31	13.21	8.87	5.68	15.71	4.16	11.55
Millet	0	8.81	9.37	3.95	0	10.24	0	5.08	0
Maize									
Kharif	18.98	10.85	3.33	12.75	9.19	7.64	9.31	7.44	10.45
Jayad	0	16.29	0	0	0	12.91	13.31	0	0
Total Maize	18.98	10.85	3.33	12.75	9.19	7.64	9.31	7.44	10.45
Marhuva	0	0	0	0	0	0	0	0	0
Sanva									
Kharif	6.7	6.18	6.8	7.37	3.84	5.53	6.46	6.21	6.32
Jayad	0	0	0	10.3	6.51	0	0	0	0
Total Sanva	6.68	6.17	6.8	7.38	3.88	5.53	6.46	6.21	6.32
Koda	7.66	7.78	3.99	8.71	4.13	7.54	6.31	6.06	6.08
Cocoon	0	0	0	3.05	0	0	0	0	0
Kutki	4.28	2.02	3.94	2.6	0	0	0	0	0
Urad									
Kharif	3.78	4.71	1.5	1.45	4.4	5.11	8.07	5.83	6.5
Jayad	4.6	4.91	5.31	4.9	5.45	5.87	5.23	5.66	6.13
Total Urad	3.78	4.71	1.5	1.45	4.4	5.11	8.06	5.83	6.5
Moong									
Kharif	3.28	3.6	0.79	2.66	4.19	3.44	6.45	5.32	5.26
Jayad	5.71	5.04	5.79	6.05	6.62	6.94	5.66	5.63	7.33
Total Moong	3.45	3.71	0.99	2.91	4.26	3.76	6.41	5.32	5.39

Masur	5.29	7	7.05	11.62	9.32	11.51	8.99	8.54	8.59
Gram	7.97	8.65	8.67	10.47	11.81	10.97	10.09	8.91	9.64
Pea	9.04	8.43	7.82	12.33	13.41	12.39	11.08	10.41	10.49
Arhar	11.26	6.84	13	11.48	15.45	7.5	9.33	8.52	8.16
Moth	0	0	0	0	0	0	0	0	0
Total Pulses	6.16	6.92	5.23	6.81	8.8	9.93	9.57	7.57	8.32
Total food (Pulses+ Rice)	10.41	10.82	8.02	11.14	11.67	11.68	12.33	9.22	12.4
Lahi / Sarson	5.27	8.34	5.78	7.9	4.09	6.32	5.46	4.57	8.77
Alsi	2.18	4.55	5.8	5.06	5.13	4.16	3.31	2.67	5.69
Til	2.1	1.3	0.42	1.66	1.53	1.29	1.6	1.48	1.72
Rendi	0	0	0	0	0	0	0	0	0
Groundnut	8.05	6.13	1.68	9.78	7.38	8.66	7.32	5.64	8.48
Sunflower	11.08	19.3	14.36	16.7	19.65	0	16.26	15.36	19.53
Soyabean	6.15	7.35	1.62	10.73	4.13	7.95	9.51	6.91	8.39
Total Oilseeds	5.86	5.8	1.56	7.78	4.61	6.2	5.66	4.3	6.47
Other crops									
Sugarcane	417.19	466.18	451.52	495.76	602.91	225.12	404.39	190.52	230.47
Potato	213.11	246.62	23.99	209.15	142.88	224.62	220.4	222.19	205.46
Tobacco	0	0	0	0	0	0	0	0	0
Jute	0	0	0	0	0	0	0	0	0
Cotton	0	0	0	0	0	0	0	0	0
Sanai	4.28	4.2	0	3.01	2.77	4.56	2.98	0	0
Turmeric	0	17.9	18.17	18.09	17.38	36.77	38.39	31.06	31.64

Source:

<http://updes.up.nic.in/spatrika/engspatrika/tab20.asp?formd=40+Lalitpur+++++++&formy=0304>
<http://updes.up.nic.in/spatrika/engspatrika/tab20.asp?formd=40+Lalitpur+++++++&formy=0607>
<http://updes.up.nic.in/spatrika/engspatrika/tab20.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 18: Blockwise Operational Landholdings Agriculture Census 1995-96 & 2000-01

District	Less than 1.00		1.00 to 2.00		2.00 to 4.00		4.00 to 10		Above 10		Total Number	
	Year 1995-96	Year 2000-01	Year 1995-96	Year 2000-01	Year 1995-96	Year 2000-01	Year 1995-96	Year 2000-01	Year 1995-96	Year 2000-01	Year 1995-96	Year 2000-01
Bar	37.81	39.75	34.92	37.41	18.10	16.47	7.83	5.54	1.33	0.82	23425	32282
Birdha	37.75	44.63	34.92	30.66	18.10	14.34	7.86	8.94	1.37	1.44	34357	29685
Mahrauni	37.74	45.69	34.86	27.11	18.16	18.31	7.85	7.67	1.38	1.21	26548	26543
Mandawara	37.70	40.75	35.02	32.09	18.01	18.59	7.90	7.44	1.37	1.12	23427	24268
Total	37.75	42.65	34.93	32.06	18.09	16.80	7.86	7.34	1.36	1.14	107757	112778
Total District	37.75	41.73	34.93	33.78	18.09	16.68	7.86	6.75	1.37	1.05	156169	177556

Source:

<http://updes.up.nic.in/spatrika/engspatrika/tab24.asp?formd=40+Lalitpur+++++++&formy=0001>
<http://updes.up.nic.in/spatrika/engspatrika/tab24.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 19: Blockwise Irrigation Intensity in the district (in hectares)
Blockwise 2000-01

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	27714	27535	100.7
Birdha	34811	34679	100.4
Mahrauni	34616	34593	100.1
Mandawara	23872	23771	100.4
Total	121013	120578	100.4
Total District	177677	176254	100.8

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2001-02

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	28890	28725	100.6
Birdha	38847	38012	102.2
Mahrauni	35340	35322	100.1
Mandawara	24563	24530	100.1
Total	127640	126589	100.8
Total District	189699	187789	101.0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2002-03

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	25998	25862	100.5
Birdha	37815	37238	101.5
Mahrauni	30451	30411	100.1
Mandawara	23697	23664	100.1
Total	117961	117175	100.7
Total District	172613	171355	100.7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2003-04

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	33121	32903	100.7
Birdha	46840	46669	100.4
Mahrauni	40728	40623	100.3
Mandawara	26789	26693	100.4
Total	147478	146888	100.4
Total District	210013	208639	100.7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0405>

Blockwise 2004-05

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	36883	36354	101.5
Birdha	50057	49724	100.7
Mahrauni	42347	42337	100.0
Mandawara	29451	29358	100.3
Total	158738	157773	100.6
Total District	226251	224852	100.6

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0506>

Blockwise 2005-06

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	40030	39660	100.9
Birdha	52632	52632	100.0
Mahrauni	44616	44616	100.0
Mandawara	31285	30607	102.2
Total	168563	167515	100.6
Total District	242399	240778	100.7

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise 2006-07

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	36138	36021	100.3
Birdha	56456	56082	100.7
Mahrauni	45501	45475	100.1
Mandawara	32110	32011	100.3
Total	170205	169589	100.4
Total District	244822	243446	100.6

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2007-08

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	7128	7065	100.9
Birdha	44973	44907	100.1
Mahrauni	35858	35854	100.0
Mandawara	27559	27555	100.0
Total	115518	115381	100.1
Total District	163215	162317	100.6

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2008-09

Block Name	Gross irrigated area	Net irrigated area	Irrigation Intensity
Bar	39512	39413	100.3
Birdha	55879	55576	100.5
Mahrauni	45818	45818	100.0
Mandawara	33906	33717	100.6
Total	175115	174524	100.3
Total District	251096	249224	100.8

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab17.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 20: Blockwise total area (hect.) irrigated by different sources in the district

Blockwise 2000-01

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	35.86	0.00	1.21	42.36	3.56	17.01	34699
Birdha	34.38	0.00	2.73	27.62	0.86	34.40	35112
Mahrauni	57.55	2.55	4.92	19.37	2.17	13.43	31555
Mandawara	29.55	0.00	2.74	23.99	3.63	40.08	21815
Total	39.88	0.65	2.87	29.02	2.45	25.14	123181
Total District	31.81	0.44	2.94	37.94	3.17	23.70	184773

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0001>

Blockwise 2001-02

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				

Bar	24.96	0.00	0.80	51.24	2.72	20.28	27535
Birdha	26.25	0.00	15.25	23.13	2.40	32.98	34679
Mahrauni	52.78	2.22	4.41	13.67	1.29	25.64	34593
Mandawara	24.74	0.56	2.67	20.72	5.24	46.07	23771
Total	33.27	0.75	6.36	26.36	2.71	30.55	120578
Total District	26.66	0.51	5.16	38.26	3.03	26.38	176254

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise **2002-03**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	25.00	0.00	0.56	49.44	3.56	21.43	28725
Birdha	33.09	0.00	17.22	21.65	3.10	24.93	38012
Mahrauni	45.87	0.00	9.95	15.98	0.64	27.56	35322
Mandawara	24.42	0.00	2.11	28.12	3.60	41.75	24530
Total	33.14	0.00	8.48	27.63	2.62	28.13	126589
Total District	29.77	0.00	6.68	36.45	2.98	24.13	187789

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise **2003-04**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	28.09	0.00	0.61	48.24	22.39	0.67	25862
Birdha	46.36	0.00	12.63	23.08	11.24	6.69	37238
Mahrauni	21.07	45.87	6.63	6.15	13.56	6.72	30411
Mandawara	15.79	0.00	1.73	51.42	19.84	11.22	23664
Total	29.59	11.90	6.22	29.96	16.04	6.29	117175
Total District	29.20	8.14	4.69	34.33	18.16	5.49	171355

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise **2004-05**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	29.16	0.00	8.63	39.18	22.25	0.77	36064
Birdha	45.29	0.00	16.90	22.62	14.18	1.01	45306
Mahrauni	38.51	0.00	19.81	14.06	25.35	2.27	25084
Mandawara	22.09	0.00	10.64	43.71	21.91	1.65	31631
Total	34.53	0.00	13.84	30.22	20.09	1.32	138085
Total District	33.33	0.00	10.93	32.96	21.34	1.44	208639

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0405>

Blockwise **2005-06**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	21.66	0.00	0.65	52.99	22.45	2.26	36354
Birdha	31.16	0.00	26.36	23.21	11.44	7.84	49724
Mahrauni	49.96	0.00	14.06	20.60	15.39	0.00	42337
Mandawara	23.34	0.00	12.20	22.27	42.20	0.00	29358
Total	32.56	0.00	14.50	29.19	20.76	2.99	157773
Total District	33.32	0.00	11.68	34.77	16.97	3.26	224852

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0506>

Blockwise **2006-07**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				

Bar	22.81	0.00	1.24	52.37	20.56	3.02	39660
Birdha	32.66	0.00	29.79	20.28	5.79	11.47	52632
Mahrauni	49.32	0.10	12.29	18.56	19.73	0.00	44616
Mandawara	20.73	0.00	8.10	25.46	45.72	0.00	30607
Total	32.59	0.03	14.41	28.37	20.29	4.32	167515
Total District	34.09	0.02	12.04	32.37	17.94	3.54	240778

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise **2007-08**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	19.00	0.00	0.41	57.24	20.82	2.52	36021
Birdha	31.34	0.00	31.74	17.97	12.64	6.32	56082
Mahrauni	45.95	0.01	17.90	22.07	14.07	0.00	45475
Mandawara	20.34	0.12	12.01	23.98	43.54	0.00	32011
Total	30.56	0.03	17.65	28.55	20.59	2.63	169589
Total District	35.34	0.02	15.05	29.48	17.07	3.05	243446

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise **2008-09**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	4.42	0.00	16.53	53.11	21.32	4.63	7065
Birdha	14.91	0.22	50.47	16.39	14.58	3.43	44907
Mahrauni	7.02	0.25	63.01	18.32	11.19	0.21	35854
Mandawara	7.16	4.70	41.82	19.70	24.94	1.67	27555
Total	9.97	1.29	50.22	20.03	16.41	2.08	115381
Total District	17.01	0.91	39.55	24.90	14.60	3.03	162317

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise **2009-10**

Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
		Public	Private				
Bar	13.57	0.50	1.54	61.00	20.12	3.27	39413
Birdha	29.06	0.40	36.06	16.97	10.65	6.86	55576
Mahrauni	34.84	0.00	42.15	10.55	11.05	1.41	45818
Mandawara	18.26	1.27	32.16	22.67	22.90	2.74	33717
Total	24.99	0.49	29.11	26.33	15.26	3.82	174524
Total District	30.99	0.34	22.51	28.61	14.19	3.36	249224

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab18.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 21: Blockwise status of sources of irrigation in district / block (Position on 31st march)

Blockwise **2000-01**

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Ground pumpset (No.)	Boring pumpset (No.)	Private tubewell (No.)	Bandhi (Hect)	Hose const. (No.)	Gul const. (km)
Bar	234	0	3284	5050	1149	882	12	0	0	0
Birdha	61	0	2368	636	2150	925	113	0	0	0
Mahrauni	133	1	2464	360	1434	1126	62	0	0	0
Mandawara	69	0	3086	320	1047	1099	39	0	0	0
Total	497	1	11202	6366	5780	4032	226	0	0	0
Total District	649	1	19617	17446	10382	6934	359	0	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab23.asp?formd=40+Lalitpur+++++++&formy=0001>

Blockwise 2001-02

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Ground pumpset (No.)	Boring pumpset (No.)	Private tubewell (No.)	Bandhi (Hect)	Hose const. (No.)	Gul const. (km)
Bar	234	0	4258	5050	117	882	12	0	0	0
Birdha	61	0	3333	636	114	925	113	0	0	0
Mahrauni	133	1	3434	360	112	1142	62	0	0	0
Mandawara	69	0	4076	320	97	1105	39	0	0	0
Total	497	1	15101	6366	440	4054	226	0	0	0
Total District	649	1	25469	17446	674	6973	359	0	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab23.asp?formd=40+Lalitpur+++++++&formy=0102>

Blockwise 2002-03

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Ground pumpset (No.)	Boring pumpset (No.)	Private tubewell (No.)	Bandhi (Hect)	Hose const. (No.)	Gul const. (km)
Bar	234	0	4276	5050	160	885	12	0	0	0
Birdha	61	0	3351	636	168	930	113	0	0	0
Mahrauni	133	1	3452	360	152	1145	62	0	0	0
Mandawara	69	0	4097	320	155	1107	39	0	0	0
Total	497	1	15176	6366	635	4067	226	0	0	0
Total District	649	1	25580	17446	963	7001	359	0	0	0

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab23.asp?formd=40+Lalitpur+++++++&formy=0203>

Blockwise 2003-04

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4276	275	0	172	19	191	12
Birdha	61	0	3351	260	1	165	17	183	94
Mahrauni	133	1	3452	279	0	143	10	153	79
Mandawara	69	0	4097	242	0	120	14	134	69
Total	497	1	15176	1056	1	600	60	661	254
Total District	649	1	25580	1651	3	943	94	1040	358

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0304>

Blockwise 2004-05

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4291	454	0	162	19	181	12
Birdha	61	0	3368	430	1	180	17	198	94
Mahrauni	133	1	3470	475	0	185	10	195	79
Mandawara	69	0	4114	436	0	109	14	123	69
Total	497	1	15243	1795	1	636	60	697	254
Total District	649	1	25681	2706	3	971	94	1068	469

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0405>

Blockwise 2005-06

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4298	510	0	168	19	187	26
Birdha	61	0	3374	486	1	186	17	204	193

Mahrauni	133	1	3476	531	0	191	10	201	170
Mandawara	69	0	4122	494	0	112	14	126	148
Total	497	1	15270	2021	1	657	60	718	537
Total District	649	1	25722	3044	3	1004	94	1101	745

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0506>

Blockwise 2006-07

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4345	638	0	177	19	196	26
Birdha	61	0	3374	565	1	186	17	204	247
Mahrauni	133	1	3490	645	0	192	10	202	234
Mandawara	69	0	4132	579	0	156	14	170	214
Total	497	1	15341	2427	1	711	60	772	721
Total District	649	1	25838	3593	3	1065	94	1162	953

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0607>

Blockwise 2007-08

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4456	706	0	336	19	355	0
Birdha	61	0	3147	723	1	220	17	238	404
Mahrauni	133	1	3286	636	0	405	10	415	287
Mandawara	69	0	2638	601	0	50	14	64	358
Total	497	1	13527	2666	1	1011	60	1072	1049
Total District	649	1	25971	4061	3	1171	94	1268	1288

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0708>

Blockwise 2008-09

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4426	706	0	320	40	360	2
Birdha	61	0	3147	723	3	230	24	257	499
Mahrauni	215	1	3286	636	0	428	10	438	329
Mandawara	69	0	2638	778	0	44	20	64	398
Total	579	1	13497	2843	3	1022	94	1119	1228
Total District	825	1	26003	4438	3	1228	94	1325	1506

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0809>

Blockwise 2009-10

Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
					Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Bar	234	0	4476	728	0	320	40	360	2
Birdha	61	0	3197	723	3	230	24	257	534
Mahrauni	215	1	3335	803	0	428	10	438	358
Mandawara	69	0	2688	950	0	84	20	104	433
Total	579	1	13696	3204	3	1062	94	1159	1327
Total District	825	1	26202	4799	3	1268	94	1365	1605

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab232004.asp?formd=40+Lalitpur+++++++&formy=0910>

Table 22: Blockwise number of cattle according to animal census 1997 and Average per family

Block Name	Bovine (Desi)				Bovine (cross breed)				Total Bovine	Mahish Jaatiya			
	More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total	More than 2,5 yrs (Male)	More than 2,5 yrs (Female)	Calf (Males & Females)	Total		More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total
Bar	20417	12632	33485	66534	0	0	0	0	66534	292	10498	13615	24405
Birdha	16696	22129	18135	56960	3	14	9	26	56986	336	10450	8400	19186
Mahrauni	19127	18805	17082	55014	0	9	6	15	55029	400	9819	7889	18108
Mandawara	20876	19264	19429	59569	0	0	0	0	59569	462	8067	8042	16571
Toatal	77116	72830	88131	238077	3	23	15	41	238118	1490	38834	37946	78270
Toatal District	126155	124626	149719	400500	4	72	71	147	400647	2806	68520	66655	137981

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab29.asp?formd=40+Lalitpur+++++++&formy=0001>

Sheep			Total goat (Male & Female)	Total (horse & pony)	Pig			Total animals	Avg. Animal per family	Total cock, hen & chicks	Other poultry	Total poultry
Pure	Cross breed	Total			Pure	Cross breed	Total					
5192	816	6008	25880	11	84	0	84	122924	7	6481	0	6481
2284	0	2284	22782	32	786	0	786	102060	5	8910	4	8914
5092	0	5092	19448	2	282	0	282	97961	6	9177	12	9189
4202	0	4202	18489	33	861	0	861	99725	6	8123	0	8123
16770	816	17586	86599	78	2013	0	2013	422670	6	32691	16	32707
29674	816	30490	148244	271	3886	177	4063	721797	5	61732	35	61767

Table 22: Blockwise number of cattle according to animal census 2003 and Average per family

Block Name	Bovine (Desi)				Bovine (cross breed)				Total Bovine	Mahish Jaatiya			
	More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total	More than 2,5 yrs (Male)	More than 2,5 yrs (Female)	Calf (Males & Females)	Total		More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total
Bar	24193	24315	29269	77777	43	96	90	229	78006	276	13206	14472	27954
Birdha	17446	27979	33100	78525	33	97	84	214	78739	321	13308	9301	22930
Mahrauni	16535	20615	29710	66860	46	132	122	300	67160	378	12987	8643	22008
Mandawara	17198	19095	25733	62026	36	78	67	181	62207	446	10684	10689	21819
Toatal	75372	92004	117812	285188	158	403	363	924	286112	1421	50185	43105	94711
Toatal District	132830	147718	183048	463596	247	646	558	1451	465047	2704	86228	74814	163746

Source: <http://updes.up.nic.in/spatrika/engspatrika/tab29.asp?formd=40+Lalitpur+++++++&formy=0910>

Sheep			Total goat (Male & Female)	Total (horse & pony)	Pig			Total animals	Avg. Animal per family	Total cock, hen & chicks	Other poultry	Total poultry
Pure	Cross breed	Total			Pure	Cross breed	Total					
2004	57	2061	26805	8	52	0	52	134886	6	7033	0	7033
1108	0	1108	23716	18	754	0	754	127265	5	9462	24	9486
2103	0	2103	20428	1	250	0	250	111950	5	9719	32	9751
1213	0	1213	20051	21	828	0	828	106139	5	8675	0	8675
6428	57	6485	91000	48	1884	0	1884	480240	5	34889	56	34945
12159	57	12216	153714	160	3662	366	4028	798979	5	65111	98	65209

Blockwise 2009-10

Block Name	Departmental reservoir			Distribution of Angulikao (in thousands)	Revenue from distributed Angulikao (Rs.)	Private reservoir		
	No.	Area (Hectare)	Production (quintal)			No.	Area (Hectare)	Production (quintal)
Bar	0	-	-	1080	-	0	-	-
Birdha	0	-	-	308	-	0	-	-
Mahrauni	0	-	-	2045	-	0	-	-
Mandawara	0	-	-	485	-	0	-	-
Total	0	0	0	3918	0	0	0	0
Total District	1	126.47	80	8103	-	0	-	-

Source:
<http://updes.up.nic.in/spatrika/engspatrika/tab31.asp?formd=40+Lalitpur++++&formy=0910>

Annexure 4.2- Secondary Data Haidergarh Branch

Table 1: Blockwise Total Population & Population of SC & ST, 1991

District Name	Block Name	Total Population					Population of SC						Population of ST					
		Total	Male	Male (%)	Female	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)
Amethi	Shukul Bazar	104413	54837	52.52	49576	47.48	28637	27.43	15000	52.38	13637	47.62	0	0.00	0	0.00	0	0.00
	Jagdishpur	130916	68791	52.55	62125	47.45	33847	25.85	17724	52.37	16123	47.63	0	0.00	0	0.00	0	0.00
	Singhpur	126575	65353	51.63	61222	48.37	40800	32.23	21117	51.76	19683	48.24	0	0.00	0	0.00	0	0.00
Barabanki	Trivediganj	124938	66599	53.31	58339	46.69	45625	36.52	24680	54.09	20945	45.91	0	0.00	0	0.00	0	0.00
	Haidargarh	129653	68928	53.16	60725	46.84	46174	35.61	24722	53.54	21452	46.46	0	0.00	0	0.00	0	0.00
Raebareli	Shivgarh	80492	42325	52.58	38167	47.42	31716	39.40	16648	52.49	15068	47.51	23	0.03	11	47.83	12	52.17
Total	Project Area	696987	366833	52.63	330154	47.37	226799	32.54	119891	52.86	106908	47.14	23	0.00	11	47.83	12	52.17

Table 1: District wise Total Population & Population of SC & ST, 2001

District Name	Block Name	Total Population					Population of SC						Population of ST					
		Total	Male	Male (%)	Female	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)	Total	Total (%)	Males	Male (%)	Females	Female (%)
Amethi	Shukul Bazar	130778	66630	50.95	64148	49.05	35605	27.23	18158	51.00	17447	49.00	40	0.03	22	55.00	18	45.00
	Jagdishpur	192491	98249	51.04	94242	48.96	46714	24.27	23649	50.63	23065	49.37	6	0.00	2	33.33	4	66.67
	Singhpur	156546	80219	51.24	76327	48.76	47423	30.29	24313	51.27	23110	48.73	11	0.01	7	0.00	4	0.00
Barabanki	Trivediganj	148370	77985	52.56	70385	47.44	55191	37.20	28950	52.45	26241	47.55	14	0.01	8	57.14	6	42.86
	Haidargarh	146603	76007	51.85	70596	48.15	51200	34.92	26340	51.45	24860	48.55	7	0.00	6	85.71	1	14.29
Raebareli	Shivgarh	98294	51112	52.00	47182	48.00	38193	38.86	19913	52.14	18280	47.86	4	0.00	2	50.00	2	50.00
Total/Avg.	Project Area	873082	450202	51.56	422880	48.44	274326	31.42	141323	51.52	133003	48.48	82	0.01	47	57.32	35	42.68

Source: Planning Commission Uttar Pradesh, Census 1991 & 2001
http://updes.up.nic.in/spatrika/engspatrika/select_distt_yr.asp

Table 2: Blockwise Decadal Growth

District Name	Block Name	1991				2001			
		Rural population			% Decadal	Rural population			% Decadal
		Total	Male	Female		Total	Male	Female	
Amethi	Shukul Bazar	104413	54837	49576	22.9	130778	66630	64148	25.3
	Jagdishpur	130916	68791	62125	24.3	192491	98249	94242	47.0
	Singhpur	126575	65353	61222	24.6	156546	80219	76327	23.7
Barabanki	Trivediganj	124938	66599	58339	19.2	148370	77985	70385	18.7
	Haidargarh	129653	68928	60725	16.0	146603	76007	70596	21.2
Raebareli	Shivgarh	80492	42325	38167	17.9	98294	51112	47182	22.1
Total/Avg.	Project Area	696987	366833	330154	20.8	873082	450202	422880	26.3

Source: Planning Commission Uttar Pradesh 1991 & 2001 (Table- 6)

Table 3: Population Density per Sq. Km.

District Name	Block Name	1991			2001		
		Area (In Sq.Km)	Total Population	Population Density	Area (In Sq.Km)	Total Population	Population Density
Amethi	Shukul Bazar	191.83	104413	544	191.76	130778	682
	Jagdishpur	199.36	130916	657	214.76	192491	896
	Singhpur	243.53	126575	520	212.61	156546	736
Barabanki	Trivediganj	229.22	124938	545	229.20	148370	647
	Haidargarh	257.22	129653	504	247.54	146603	592
Raebareli	Shivgarh	198.79	80492	405	185.17	98294	531
Total/Avg.	Project Area	1319.95	696987	528	1281.04	873082	682

Source: Planning Commission Uttar Pradesh, Census 1991 & 2001

Table 4: Sex Ratio: Number of families per 1000 males

District Name	Block Name	Year 1991			Year 2001		
		Male	Female	Sex Ratio	Male	Female	Sex Ratio
Amethi	Shukul Bazar	54837	49576	904	66630	64148	963
	Jagdishpur	68791	62125	903	98249	94242	959
	Singhpur	65353	61222	937	80219	76327	951
Barabanki	Trivediganj	66599	58339	876	77985	70385	903
	Haidargarh	68928	60725	881	76007	70596	929
Raebareli	Shivgarh	42325	38167	902	51112	47182	923
Total/Avg.	Project Area	366833	330154	900	450202	422880	939

Source: Planning Commission Uttar Pradesh, Census 1991 & 2001

Table 5: Blockwise Sex wise Literacy percentage and Gender Gap in Literacy

District Name	Block Name	Year 1991						
		Literate people			Literacy percentage			Gender Gap in Literacy
		Male	Female	Total	Male	Female	Total	
Year 1991								
Amethi	Shukul Bazar	16084	4301	20385	36.59	10.86	24.39	25.73
	Jagdishpur	25254	6766	32020	45.70	13.71	30.61	31.99
	Singhpur	24261	6481	30742	45.82	13.10	30.02	32.72
Barabanki	Trivediganj	28088	7717	35805	51.28	16.44	35.20	34.84
	Haidargarh	22809	5041	27850	39.93	10.23	26.17	29.70
Raebareli	Shivgarh	17769	5640	23409	51.09	18.22	35.61	32.87
Total	Project Area	134265	35946	170211	45.07	13.76	30.33	31.31
Year 2001								
CSM Nagar	Shukul Bazar	28069	13193	41262	52.44	25.69	39.34	26.75
	Jagdishpur	48673	24975	73648	62.09	33.16	47.92	28.93
	Singhpur	37886	17121	55007	58.39	27.76	43.46	30.63
Barabanki	Trivediganj	41028	20939	61967	64.46	36.80	51.40	27.66
	Haidargarh	33651	16533	50184	54.56	28.95	42.25	25.61
Raebareli	Shivgarh	28239	14683	42922	67.75	38.35	53.68	29.40
Total/Avg.	Project Area	217546	107444	324990	59.95	31.79	46.34	28.16

Source: Planning Commission Uttar Pradesh, Census 1991 & 2001 (Table 15)

Table 6: Blockwise Number of schools per lacs population

District Name	Block Name	Number of primary schools per lacs population			Number of senior primary schools per lacs population			Number of higher secondary schools per lacs population		
		2000-01	2005-06	2008-09	2000-01	2005-06	2008-09	2000-01	2005-06	2008-09
Amethi	Shukul Bazar	78.5	65.8	68.8	16.3	13.0	28.3	2.9	2.3	3.1
	Jagdishpur	70.3	49.4	50.9	15.3	12.5	22.9	5.3	4.2	4.2
	Singhpur	70.3	71.5	76.7	12.6	11.5	19.8	3.2	7.0	6.4
Barabanki	Trivediganj	80.0	78.9	82.2	16.0	25.6	29.7	4.0	6.1	6.1
	Haidargarh	77.9	82.2	90.0	13.9	19.1	25.2	2.3	4.5	6.1
Raebareli	Shivgarh	94.4	97.7	110.9	18.6	26.5	38.7	3.7	4.1	4.1
Total/Avg.	Project Area	78.6	74.3	79.9	15.5	18.0	27.4	3.6	4.7	5.0

Source: Planning Commission Uttar Pradesh 2001 (Table- 3) & Stastical Abstract 2010

Table 7: Blockwise situation of safe Source of water supply in the villages

District Name	Block Name	Villages under water supply by Tap/ Hand pump India mark 2			No. of villages using general sources					
		Fully Covered	Partially Covered	Benefited Population	Well	General Hand pu mp	Hand pu mp India mark 2	Tap	Other	Total
Blockwise 2000-01										
Amethi	Shukul Bazar	70	0	104413	0	0	70	0	0	70
	Jagdishpur	91	0	130916	0	0	91	0	0	91
	Singhpur	74	0	139311	0	0	74	0	0	74
Barabanki	Trivediganj	102	0	124938	0	0	102	0	0	102
	Haidargarh	100	0	129653	0	0	100	0	0	100
Raebareli	Shivgarh	62	0	80492	0	0	62	0	0	62
Total/Avg.	Project Area	499	0	709723	0	0	499	0	0	499
Blockwise 2005-06										
Amethi	Shukul Bazar	70	0	130778	0	0	70	0	0	70
	Jagdishpur	91	0	192491	0	0	91	0	0	91
	Singhpur	74	0	156546	0	0	74	0	0	74
Barabanki	Trivediganj	102	0	148370	0	0	102	0	0	102
	Haidargarh	101	0	157010	0	0	101	0	0	101
Raebareli	Shivgarh	62	0	98294	0	0	62	0	0	62
Total/Avg.	Project Area	500	0	883489	0	0	500	0	0	500
Blockwise 2009-10										
Amethi	Shukul Bazar	70	0	130778	0	0	70	0	0	70
	Jagdishpur	91	0	192491	0	0	91	0	0	91
	Singhpur	74	0	181739	0	0	74	0	0	74
Barabanki	Trivediganj	102	0	148370	0	0	102	0	0	102
	Haidargarh	100	0	146603	0	0	100	0	0	100
Raebareli	Shivgarh	62	0	114231	0	0	62	0	0	62
Total/Avg.	Project Area	499	0	914212	0	0	499	0	0	499

Source: Planning Commission Uttar Pradesh 2001 & 2010 (Table 54)

Table 8: Length of total Mettled roads per thousands sq. Km. (Km.)

District Name	Block Name	2000-01	2005-06	2008-09
Amethi	Shukul Bazar	432.7	537.1	750.9
	Jagdishpur	632.0	833.5	1084.9
	Singhpur	616.0	856.0	1077.1
Barabanki	Trivediganj	418.8	549.7	776.6
	Haidargarh	602.6	820.1	1151.3
Raebareli	Shivgarh	533.2	750.7	966.7
Total/Avg.	Project Area	539.2	724.5	967.9

Source: Planning Commission Uttar Pradesh Year 2000-01, 2005-06 & 2008-09

Table 9: Blockwise percentage of Electrified to total Villages

District Name	Block Name	Percentage of electrified villages to total villages in population		
		2000-01	2005-06	2008-09
Amethi	Shukul Bazar	100.0	100	100.0
	Jagdishpur	100.0	97.8	100.0
	Singhpur	98.6	95.9	100.0
Barabanki	Trivediganj	52.0	91.2	100.0
	Haidargarh	66.0	96.0	100.0
Raebareli	Shivgarh	100	96.8	100.0
Total/Avg.	Project Area	99.3	96.3	100.0

Source: Planning Commission Uttar Pradesh 2001 & 2010 (Table 3)

Table 10: Number of Branches Nationalized banks and rural banks in the district

District Name	Block Name	2000-01			2005-06			2009-10		
		No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks	No. of Nationalized Banks	No. of Rural Banks	No. of other Non-Commercial Nationalized Banks
Amethi	Shukul Bazar	1	3	0	1	3	1	2	3	1
	Jagdishpur	7	4	0	8	4	3	9	4	4
	Singhpur	5	4	0	4	3	0	5	3	1
Barabanki	Trivediganj	1	6	1	1	6	1	2	6	1
	Haidargarh	0	3	0	0	3	0	1	2	0
Raebareli	Shivgarh	1	3	0	1	3	0	1	3	1
Total/Avg.	Project Area	15	23	1	15	22	5	20	21	8

Source: Planning Commission Uttar Pradesh 2001 (Table- 52)

Table 11: Blockwise Number of Post office and Telephones

District Name	Block Name	2000-01				2005-06				2009-10			
		Post Office	Telegraph Office	P.C.O.	Telephone	Post Office	Telegraph Office	P.C.O.	Telephone	Post Office	Telegraph Office	P.C.O.	Telephone
Amethi	Shukul Bazar	15	0	48	263	15	0	75	636	15	0	138	544
	Jagdishpur	23	2	159	1121	23	2	191	1999	23	0	347	1768
	Singhpur	29	0	38	284	30	0	18	566	30	0	37	354
Barabanki	Trivediganj	19	0	12	42	21	0	19	463	21	0	80	400
	Haidargarh	29	1	46	153	28	0	58	672	26	0	70	600
Raebareli	Shivgarh	20	0	35	160	20	0	40	720	20	0	14	220
Total/Avg.	Project Area	135	3	338	2023	137	2	401	5056	135	0	686	3886

Source: Planning Commission Uttar Pradesh 2001 (Table- 51)

Table 12: Number of Health facilities per lacs population

District Name	Block Name	Number of Allopathic hospitals and primary health centres per lacs population			Number of beds available in Allopathic hospitals and primary health centres per lacs population		
		2000-01	2005-06	2008-09	2000-01	2005-06	2008-09
Amethi	Shukul Bazar	2.9	2.3	3.1	11.5	9.2	9.2
	Jagdishpur	5.3	3.6	5.2	38.2	26.0	26.0
	Singhpur	4.0	3.2	3.2	14.2	11.5	11.5
Barabanki	Trivediganj	1.6	1.3	1.3	6.4	5.4	5.4
	Haidargarh	5.4	4.5	4.8	38.6	34.4	36.8
Raebareli	Shivgarh	5.0	5.1	5.1	22.4	18.3	38.7
Total/Avg.	Project Area	4.0	3.3	3.8	21.9	17.5	21.3

Source: Planni http://updes.up.nic.in/spatrika/engspatrika/select_distt_yr.asp

Table 13: Blockwise Total Workers in Different Activities

District Name	Block Name	Farmers	Agricultural labourers	Animal husbandry/forestry / tree plantation	Mining and quarrying	Household	Non household	Construction work	Trade and commerce	Transport, storage and communication	Other workers	Main workers	Marginal workers	Total workers
Year 1991														
Amethi	Shukul Bazar	23309	8669	53.0	4	435	429	27	629	114	830	34499	3136	37635
	Jagdishpur	23708	10982	101.0	2	479	1330	75	1484	374	2025	40560	1490	42050
	Singhpur	26839	10878	212.0	8	674	537	88	1187	151	2581	43155	3066	46221
Barabanki	Trivediganj	30754	6975	247.0	1	350	476	62	892	175	2140	42072	2744	44816
	Haidargarh	34097	12550	54.0	1	336	268	55	533	78	1489	49461	2105	51566
Raebareli	Shivgarh	17519	4619	98.0	4	159	218	48	661	131	1824	25281	3564	28845
Total/Avg.	Project Area	156226	54673	765	20	2433	3258	355	5386	1023	10889	235028	16105	251133
Year 2001														
Amethi	Shukul Bazar	15215	5553	0.0	0	915	0	0	0	0	4392	26075	19170	45245
	Jagdishpur	16668	7546	0.0	0	1930	0	0	0	0	12476	38620	20159	58779
	Singhpur	21275	8609	0.0	0	1415	0	0	0	0	5511	36810	23253	60063
Barabanki	Trivediganj	25925	5771	0.0	0	1323	0	0	0	0	4541	37560	21044	58604
	Haidargarh	21245	8678	0.0	0	1244	0	0	0	0	4023	35190	23412	58602
Raebareli	Shivgarh	17586	4539	0.0	0	1121	0	0	0	0	3003	26249	11148	37397
Total/Avg.	Project Area	117914	40696	0	0	7948	0	0	0	0	33946	200504	118186	318690

Source: Planning Commission Uttar Pradesh 1991& 2001 (Table-8)

Table 14: Blockwise Percent of families below Poverty Line

District Name	Block Name	Year 1998			Year 2002		
		No. of families below poverty line (1997-98)	No. of families Number	BPL Families (%)	No. of families below poverty line (2002)	No. of families Number	BPL Families (%)
Amethi	Shukul Bazar	13808	19695	70.1	13808	22387	61.7
	Jagdishpur	18864	23112	81.6	18864	31941	59.1
	Singhpur	20973	23817	88.1	21138	27247	77.6
Barabanki	Trivediganj	10325	23430	44.1	17255	26181	65.9
	Haidargarh	11401	25083	45.5	18311	26694	68.6
Raebareli	Shivgarh	12607	15654	80.5	12379	17822	69.5
Total/Avg.	Project Area	87978	130791	67.3	101755	152272	66.8

Source: Department of Rural Development, Government of UP, 1998 & 2002

Table 15: Blockwise land usage in the district (in hectares)

District Name	Block Name	Total Area	Forest	Barren C ult. Waste	Present fallow land	Other fallow land	Barren & uncult. Land	Land put to use other than agriculture	Pastures to non- agri. Use	Area under bush, forest & garden	Net area sown	Area sown more than once	Gross area sown				Land prepared for sugarcane	Net irrigated area	Gross irrigated area
													Total	Rabi	Kharif	Jayad			
Blockwise 2000-01																			
Amethi	Shukul Bazar	19357	893	805	1280	1020	611	1558	171	526	12493	6456	18949	8501	8337	1699	0	7712	11391
	Jagdishpur	21569	63	700	2598	357	635	2376	251	823	13766	7581	21347	8479	9914	2443	0	7040	9498
	Singhpur	24105	300	1327	73	1110	579	2433	300	1034	16949	3798	20747	11167	9093	487	0	15419	18229
Barabanki	Trivediganj	22889	339	661	1358	1453	352	2295	159	820	15452	10130	25582	11754	11368	2460	0	14312	25979
	Haidargarh	25831	965	462	1783	1696	746	2850	357	503	16469	12514	28983	11311	15497	2175	0	17063	23767
Raebareli	Shivgarh	19527	98	783	265	2281	1124	2275	232	628	11841	6073	17914	7955	9184	775	0	11365	17059
Total/Avg.	Project Area	133278	2658	4738	7357	7917	4047	13787	1470	4334	86970	46552	133522	59167	63393	10039	0	72911	105923
Blockwise 2005-06																			
Amethi	Shukul Bazar	19148	853	660	1424	1013	577	1727	94	486	12314	5278	17592	8630	7375	1586	1	8279	13527
	Jagdishpur	21542	60	572	2848	370	600	2632	136	740	13584	6795	20379	8608	9469	2301	1	7553	12308
	Singhpur	21399	349	496	1592	1151	489	3125	219	1045	12933	8645	21578	10545	10419	614	0	11113	20312
Barabanki	Trivediganj	23506	339	275	1954	1008	403	2570	118	747	16092	14374	30466	13042	14568	2856	0	14423	25676
	Haidargarh	25626	965	570	2659	1099	284	3189	266	485	16109	14248	30357	11721	16098	2537	1	14324	25584
Raebareli	Shivgarh	19258	114	1372	583	2198	1111	3097	232	640	9911	8097	18008	7801	9590	617	0	9788	17308
Total/Avg.	Project Area	130479	2680	3945	11060	6839	3464	16340	1065	4143	80943	57437	138380	60347	67519	10511	3	65480	114715
Blockwise 2008-09																			
Amethi	Shukul Bazar	19237	885	602	1221	1016	588	1775	94	488	12568	5137	17705	7765	8384	1566	0	8730	13898
	Jagdishpur	21465	62	521	2464	374	612	2696	137	742	13857	6635	20492	9858	8362	2274	0	7984	12659
	Singhpur	24154	350	532	3724	1499	489	3237	217	1338	12768	8319	21087	10470	9945	672	0	13119	20835
Barabanki	Trivediganj	23608	383	316	1734	1194	293	2630	123	721	16214	14393	30607	13523	14310	2774	0	14348	27070
	Haidargarh	25845	1090	655	2353	1301	206	3263	275	468	16234	14409	30643	12152	15979	2511	1	14366	27102
Raebareli	Shivgarh	19490	114	1451	1504	2120	1092	3209	222	366	9412	7613	17025	7688	8647	690	0	10119	17754
Total/Avg.	Project Area	133799	2884	4077	13000	7504	3280	16810	1068	4123	81053	56506	137559	61456	65627	10487	1	68666	119318

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2010 (Table 17)

Table 16: Bloickwise Cropping Intensity

District Name	Block Name	2000-2001			2005-2006			2008-2009		
		Gross area sown	Net area sown	Cropping Intensity (in Ha)	Gross area sown	Net area sown	Cropping Intensity (in Ha)	Gross area sown	Net area sown	Cropping Intensity (in Ha)
Amethi	Shukul Bazar	18949	12493	151.7	17592	12314	142.9	17705	12568	140.9
	Jagdishpur	21347	13766	155.1	20379	13584	150.0	20492	13857	147.9
	Singhpur	20747	16949	122.4	21578	12933	166.8	21087	12768	165.2
Barabanki	Trivediganj	25582	15452	165.6	30466	16092	189.3	30607	16214	188.8
	Haidargarh	28983	16469	176.0	30357	16109	188.4	30643	16234	188.8
Raebareli	Shivgarh	17914	11841	151.3	18008	9911	181.7	17025	9412	180.9
Total/Avg.	Project Area	133522	86970	153.5	138380	80943	171.0	137559	81053	169.7

Source: Planning Commission Uttar Pradesh Year 2000-01, 2005-06 & 2009-10

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley		Jwar		Millet		Maize kharif	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	6300	3829	0	0	6300	3829	6590	6562	69	44	590	0	13	0	222	0
	Jagdishpur	7407	6815	0	0	7407	6815	6872	6814	96	67	621	0	12	0	209	0
	Singhpur	7761	7511	0	0	7761	7511	9388	9388	254	182	524	0	20	0	0	0
Barabanki	Trivediganj	9906	9664	0	0	9906	9664	9476	9376	10	5	292	0	11	0	50	2
	Haidargarh	12573	12032	0	0	12573	12032	9903	9800	35	10	438	0	13	0	92	0
Raebareli	Shivgarh	8638	8638	0	0	8638	8638	6941	6932	28	12	115	0	2	0	0	0
Total/Avg.	Project Area	52585	48489	0	0	52585	48489	49170	48872	492	320	2580	0	71	0	573	2

Blockwise 2005-06

District Name	Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley		Jwar		Millet		Maize kharif	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	6094	5978	0	0	6094	5978	6753	6743	51	37	519	0	7	0	229	1
	Jagdishpur	7223	7169	0	0	7223	7169	7059	7038	79	62	549	0	7	0	213	1
	Singhpur	9833	9833	0	0	9833	9833	9560	9560	40	15	196	0	0	0	0	0
Barabanki	Trivediganj	10227	9782	0	0	10227	9782	10687	10509	8	4	319	0	28	0	135	4
	Haidargarh	13238	12567	0	0	13238	12567	11141	10956	20	5	450	1	29	0	176	0
Raebareli	Shivgarh	9083	9042	2	2	9085	9044	6910	6910	37	25	26	0	0	0	0	0
Total/Avg.	Project Area	55698	54371	2	2	55700	54373	52110	51716	235	148	2059	1	71	0	753	6

Blockwise 2008-09

District Name	Block Name	Rice kharif		Rice jayad		Total rice		Wheat		Barley		Jwar		Millet		Maize kharif	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	6240	6230	0	0	6240	6230	6773	6768	54	43	491	0	4	0	194	2
	Jagdishpur	7437	7426	0	0	7437	7426	7082	7078	79	73	521	0	5	0	181	2
	Singhpur	10202	10200	0	0	10202	10200	9723	9722	40	15	134	0	0	0	0	0
Barabanki	Trivediganj	10579	10223	0	0	10579	10223	11535	11800	2	1	243	0	25	0	120	0
	Haidargarh	13638	13214	0	0	13638	13214	11908	11885	6	2	305	0	28	0	160	0
Raebareli	Shivgarh	9424	9423	0	0	9424	9423	7028	7027	36	25	18	0	0	0	0	0
Total/Avg.	Project Area	57520	56716	0	0	57520	56716	54049	54280	217	159	1712	0	62	0	655	4

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2009 (Table- 19)

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Maize jayad		Total Maize		Marhuva		Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki		Total dhaan	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	222	0	0	0	54	0	8	8	62	8	149	0	7	0	0	0	14002	10443
	Jagdishpur	2	2	211	2	0	0	21	0	10	10	31	10	8	0	17	0	0	0	15275	13708
	Singhpur	0	0	0	0	0	0	0	0	10	10	10	10	0	0	0	0	0	0	17957	17091
Barabanki	Trivediganj	5	5	55	7	0	0	0	0	6	6	6	6	68	0	0	0	0	0	19824	19058
	Haidargarh	0	0	92	0	0	0	16	0	10	10	26	10	64	0	1	0	0	0	23145	21852
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	5	5	5	5	0	0	0	0	0	0	15729	15587
Total/Avg.	Project Area	7	7	580	9	0	0	91	0	49	49	140	49	289	0	25	0	0	0	105932	97739

Blockwise 2005-06

District Name	Block Name	Maize jayad		Total Maize		Marhuva		Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki		Total dhaan	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	3	3	232	4	7	0	3	3	10	3	52	0	13718	12765	171	1	241	241
	Jagdishpur	0	0	7	7	220	8	5	0	5	5	10	5	1	0	15148	14282	113	1	299	299
	Singhpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19629	19408
Barabanki	Trivediganj	5	5	140	9	0	0	0	0	0	0	0	0	40	0	0	0	0	0	21449	20304
	Haidargarh	1	1	177	1	0	0	4	0	0	0	4	0	39	0	0	0	0	0	25098	23530
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	16059	15980
Total/Avg.	Project Area	6	6	327	20	452	12	16	0	9	9	25	9	132	0	28866	27047	284	2	82775	79762

Blockwise 2008-09

District Name	Block Name	Maize jayad		Total Maize		Marhuva		Sanva kharif		Sanva jayad		Total sanva		Koda		Cocoon		Kutki		Total dhaan	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	3	3	5	5	202	10	5	0	0	0	5	0	47	0	13816	13051	159	1	259	259
	Jagdishpur	2	2	10	10	193	14	4	0	1	1	5	1	2	0	15324	14592	101	2	316	316
	Singhpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20099	19937
Barabanki	Trivediganj	4	4	124	4	0	0	0	0	0	0	0	0	20	0	0	0	0	0	22528	22028
	Haidargarh	0	0	161	1	0	0	0	0	0	0	0	0	20	0	0	0	0	0	26066	25102
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	16507	16476
Total/Avg.	Project Area	9	9	300	20	395	24	9	0	2	2	11	2	89	0	29140	27643	260	3	85775	84118

Source: Planning Commission Ut

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad		Total moong		Masur		Gram		Pea		Arhar	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	149	0	287	285	436	285	3	0	41	41	44	41	160	65	897	8	307	279	676	0
	Jagdishpur	97	0	342	339	439	339	4	0	30	30	34	30	174	52	1325	13	290	222	261	0
	Singhpur	200	0	244	244	444	244	3	0	57	57	60	57	40	5	590	60	424	94	424	0
Barabanki	Trivediganj	313	0	317	311	630	311	0	0	22	19	22	19	60	34	133	1	244	174	303	0
	Haidargarh	489	0	266	266	755	266	3	0	6	6	9	6	211	21	212	1	446	226	475	0
Raebareli	Shivgarh	170	0	284	284	454	284	3	0	23	23	26	23	17	1	43	0	204	15	110	0
Total/Avg.	Project Area	1418	0	1740	1729	3158	1729	16	0	179	176	195	176	662	178	3200	83	1915	1010	2249	0

Blockwise 2005-06

District Name	Block Name	Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad		Total moong		Masur		Gram		Pea		Arhar	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	412	242	2	0	33	33	35	33	233	39	606	5	309	238	569	0	2164	557	15882	13322
	Jagdishpur	412	300	3	0	29	29	32	29	249	36	824	12	297	193	178	0	1992	570	17140	14852
	Singhpur	96	0	272	272	368	272	10	0	17	17	27	17	148	6	58	9	314	28	91	0
Barabanki	Trivediganj	608	2	117	117	725	119	0	0	14	14	14	14	47	8	40	1	188	145	288	0
	Haidargarh	928	0	91	91	1019	91	0	0	6	6	6	6	231	5	72	1	352	187	438	0
Raebareli	Shivgarh	145	0	217	212	362	212	1	0	19	19	20	19	30	3	38	4	152	21	119	0
Total/Avg.	Project Area	2601	544	702	692	2536	756	78	62	538	131	1497	73	1062	453	955	15	5162	1508	33958	28174

Blockwise 2008-09

District Name	Block Name	Urad kharif		Urad jayad		Total urad		Moong kharif		Moong jayad		Total moong		Masur		Gram		Pea		Arhar	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	418	260	3	0	38	38	41	38	251	37	570	6	304	240	539	0	2123	581	15939	13632
	Jagdishpur	417	318	2	0	37	37	39	37	265	35	788	15	293	193	156	0	1958	598	17282	15190
	Singhpur	81	19	283	283	364	302	6	0	31	31	37	31	105	5	55	6	257	34	57	0
Barabanki	Trivediganj	640	0	88	87	728	87	0	0	8	8	8	8	50	5	40	0	188	125	215	0
	Haidargarh	1027	0	63	63	1090	63	0	0	4	4	4	4	160	5	80	1	368	265	328	0
Raebareli	Shivgarh	122	0	226	226	348	226	0	0	22	22	22	22	24	3	36	3	124	26	76	0
Total/Avg.	Project Area	2705	597	665	659	2605	753	86	75	581	137	1429	86	936	451	906	10	5018	1629	33897	28822

Source: Planning Commission Ut

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Moth		Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi		Groundnut		Sunflower	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	2520	678	16522	11121	148	146	1	0	9	0	0	0	0	0	17	17
	Jagdishpur	0	0	2523	656	17798	14364	172	171	3	0	6	0	0	0	0	0	45	45
	Singhpur	0	0	1982	460	19939	17551	146	142	0	0	5	0	0	0	0	0	0	0
Barabanki	Trivediganj	0	0	1392	539	21216	19597	378	274	10	0	38	7	0	0	35	0	0	0
	Haidargarh	0	0	2108	520	25253	22372	436	344	19	0	17	1	0	0	2	0	1	0
Raebareli	Shivgarh	0	0	854	323	16583	15910	243	237	93	0	7	0	0	0	0	0	0	0
Total/Avg.	Project Area	0	0	11379	3176	117311	100915	1523	1314	126	0	82	8	0	0	37	0	63	62

Blockwise 2005-06

District Name	Block Name	Moth		Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi		Groundnut		Sunflower	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	171	169	1	0	7	0	1	0	4	4	0	0	184	173	23	23	201	201
	Jagdishpur	199	196	1	0	5	0	2	0	8	8	0	0	215	204	39	39	171	171
	Singhpur	0	0	1006	332	20635	19740	285	210	2	0	1	0	0	0	0	0	1	1
Barabanki	Trivediganj	0	0	1302	287	22751	20591	390	347	7	0	38	1	0	0	81	0	0	0
	Haidargarh	0	0	2118	290	27216	23820	457	407	9	0	22	1	0	0	38	0	0	0
Raebareli	Shivgarh	0	0	721	259	16780	16239	274	226	40	13	2	0	0	0	0	0	0	0
Total/Avg.	Project Area	370	365	5149	1168	87394	80390	1409	1190	70	25	63	2	399	377	181	62	373	373

Blockwise 2008-09

District Name	Block Name	Moth		Total pulses		Total grains		Lahi/Sarson		Alsi		Til		Rendi		Groundnut		Sunflower	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	174	167	1	0	7	0	2	0	2	2	0	0	186	169	22	22	215	215
	Jagdishpur	204	195	1	0	6	0	2	0	5	5	0	0	218	200	37	37	184	184
	Singhpur	0	0	875	378	20974	20315	258	236	0	0	9	0	0	0	0	0	0	0
Barabanki	Trivediganj	0	0	1229	225	23757	22253	632	582	2	0	30	0	0	0	60	0	0	0
	Haidargarh	0	0	2030	338	28096	25440	708	658	2	0	19	0	0	0	28	0	0	0
Raebareli	Shivgarh	0	0	630	280	17137	16756	248	248	21	5	10	0	0	0	0	0	0	0
Total/Avg.	Project Area	378	362	4766	1221	89977	84764	1850	1724	32	12	68	0	404	369	147	59	399	399

Source: Planning Commission Ut

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Soyabean		Total oilseeds		Sugarcane		Potato		Onion		Other vegetables		Tobacco	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	175	163	7	7	194	194	38	38	460	450	0	0
	Jagdishpur	0	0	226	216	23	23	161	161	25	25	530	430	0	0
	Singhpur	0	0	151	142	40	40	96	96	0	0	0	0	0	0
Barabanki	Trivediganj	0	0	461	281	163	138	211	211	0	0	0	0	8	8
	Haidargarh	0	0	475	345	128	122	248	248	0	0	0	0	4	4
Raebareli	Shivgarh	0	0	343	237	41	41	95	95	0	0	0	0	0	0
Total/Avg.	Project Area	0	0	1831	1384	402	371	1005	1005	63	63	990	880	12	12

Blockwise 2005-06

District Name	Block Name	Soyabean		Total oilseeds		Sugarcane		Potato		Onion		Other vegetables		Tobacco	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	13	13	41	41	54	54	371	371	121	31	79	79	571	481
	Jagdishpur	12	12	33	33	45	45	368	368	122	29	81	81	571	478
	Singhpur	0	0	289	211	170	170	75	75	18	18	292	289	0	0
Barabanki	Trivediganj	0	0	516	348	94	83	381	381	30	30	485	468	4	4
	Haidargarh	0	0	526	408	88	83	325	325	37	37	415	401	2	2
Raebareli	Shivgarh	0	0	316	239	66	66	92	92	19	19	215	213	0	0
Total/Avg.	Project Area	25	25	1721	1280	517	501	1612	1612	347	164	1567	1531	1148	965

Blockwise 2008-09

District Name	Block Name	Soyabean		Total oilseeds		Sugarcane		Potato		Onion		Other vegetables		Tobacco	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	11	11	42	42	53	53	392	392	111	25	82	82	585	499
	Jagdishpur	12	12	33	33	45	45	393	393	115	23	90	90	598	506
	Singhpur	0	0	267	236	149	149	67	67	8	8	273	270	0	0
Barabanki	Trivediganj	0	0	724	582	83	70	475	475	17	17	527	527	2	2
	Haidargarh	0	0	757	658	79	68	398	398	17	17	443	443	2	2
Raebareli	Shivgarh	0	0	279	253	57	57	83	83	8	8	219	217	0	0
Total/Avg.	Project Area	23	23	2102	1804	466	442	1808	1808	276	98	1634	1629	1187	1009

Source: Planning Commission Ut

Table 17: Blockwise area covered by main crops in the district (In hect.)

Blockwise 2000-01

District Name	Block Name	Jute		Cotton		Sanai		Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	0	0	10	0	0	0	130	130	340	2	48	48
	Jagdishpur	0	0	0	0	18	0	0	0	109	109	409	1	79	79
	Singhpur	0	0	0	0	2	0	0	0	71	71	90	0	14	14
Barabanki	Trivediganj	0	0	0	0	0	0	0	0	281	276	162	6	81	80
	Haidargarh	0	0	0	0	0	0	0	0	159	157	241	0	43	43
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	124	124	65	0	43	43
Total/Avg.	Project Area	0	0	0	0	30	0	0	0	874	867	1307	9	308	307

Blockwise 2005-06

District Name	Block Name	Jute		Cotton		Sanai		Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	0	0	1	0	0	0	151	151	256	3	55	55
	Jagdishpur	0	0	0	0	0	0	0	0	133	133	291	2	87	87
	Singhpur	0	0	0	0	0	0	0	0	152	152	80	0	26	24
Barabanki	Trivediganj	0	0	0	0	0	0	0	0	277	276	149	2	88	88
	Haidargarh	0	0	0	0	0	0	0	0	143	142	232	5	51	51
Raebareli	Shivgarh	0	0	0	0	1	0	0	0	141	141	50	1	47	47
Total/Avg.	Project Area	0	0	0	0	2	0	0	0	997	995	1058	13	354	352

Blockwise 2008-09

District Name	Block Name	Jute		Cotton		Sanaï		Turmeric		Total Rabi fodder		Total Kharif fodder		Total Jayad fodder	
		Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated	Total	Irrigated
Amethi	Shukul Bazar	0	0	0	0	0	0	0	0	161	160	246	4	63	63
	Jagdishpur	0	0	0	0	0	0	0	0	142	141	282	5	97	97
	Singhpur	0	0	0	0	0	0	0	0	142	142	81	4	34	34
Barabanki	Trivediganj	0	0	0	0	0	0	0	0	226	225	256	1	82	82
	Haidargarh	0	0	0	0	0	0	0	0	120	120	124	1	45	45
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	131	131	51	6	61	61
Total/Avg.	Project Area	0	0	0	0	0	0	0	0	922	919	1040	21	382	382

Source: Planning Commission Ut

Table 18: Average production of main crops (quintal/hectare) in the district

Name of crops	2000-01	2005-06	2008-09
District: Barabanki			
Rice			
Kharif	17.78	23.25	20.52
Jayad	17.05	0	0
Total rice	17.78	23.25	20.52
Wheat	28.15	28.99	30.69
Barley	21.43	18.55	23.36
Jwar	7.62	4.82	7.37
Millet	15.53	15.16	16.36
Maize			
Kharif	14.01	11.56	0.04
Jayad	16.22	12.91	15.32
Total Maize	14.3	11.71	1.52
Marhuva	0	0	0
Sanva			
Kharif	6.7	5.53	6.32
Jayad	9.16	6.85	0
Total sanva	7.93	5.5	6.32
Koda	7.66	7.54	6.98
Cocoon	3.04	0	0
Kutki	0	0	0
Urad			
Kharif	4.41	4.97	5.21
Jayad	4.28	4.51	4.45
Total urad	4.35	4.87	5.09
Moong			
Kharif	3.02	2.87	3.74
Jayad	6.31	4.25	4.57
Total moong	5.71	4.19	4.57
Masur	8.46	6.64	8.29
Gram	11.78	8.99	10.27
Pea	10.11	11.67	12.03
Arhar	10.07	10.04	9.59
Moth	3.06	0	0
Total pulses	8.21	6.98	7.81
Total food (Pulses+ R	28.39	23.18	23.41
Lahi / Sarson	8.78	11.5	6.45
Alsi	3.6	4.24	4.4
Til	1.61	1.93	1.69
Rendi	0	0	0
Groundnut	8.35	8.73	7.35
Sunflower	13.04	14.23	19.53
Soyabean	0	0	0
Total Oilseeds	8.59	11.1	6.44
Other crops			
Sugarcane	561.92	494.44	507.2
Potato	193.77	190.44	128.81
Tobacco	68.77	58.21	56.09
Jute	0	0	0
Cotton	1.52		
Sanai	0	0	0
Turmeric	17.44	0	0

Table 18: Average production of main crops (quintal/hectare) in the district

Name of crops	2000-01	2005-06	2008-09
District: Raebareli			
Rice			
Kharif	15.39	20.83	22.63
Jayad	0	20.83	0
Total rice	15.39	20.83	22.63
Wheat	21.88	20.58	25.47
Barley	14.61	15.1	19.09
Jwar	7.47	8.96	8.59
Millet	7.84	7.43	10.57
Maize			
Kharif	8.09	13.36	11.82
Jayad	0	12.91	15.32
Total Maize	8.09	13.48	11.89
Marhuva	14.6	0	0
Sanva			
Kharif	0	5.53	0
Jayad	9.16	6.85	18.17
Total sanva	9.16	7	18.17
Koda	6.72	0	0
Cocoon	0	0	0
Kutki	0	0	0
Urad			
Kharif	3.91	3.44	3.64
Jayad	4.14	4.97	5.37
Total urad	3.97	3.74	4.04
Moong			
Kharif	1.77	2.91	3.74
Jayad	5.71	6.94	4.86
Total moong	3.25	4.04	4.23
Masur	10.72	7.21	8.33
Gram	10.12	12.31	11.62
Pea	9.99	11.67	12.03
Arhar	12.36	8.79	7.21
Moth	3.06	0	0
Total pulses	8.18	7.25	6.93
Total food (Pulses+ R	17.1	18.75	22.26
Lahi / Sarson	7.38	6.52	9.02
Alsi	3.6	4.24	4.4
Til	1.31	1.48	2.25
Rendi	0	0	0
Groundnut	6.56	7.59	7.41
Sunflower	13.04	17.84	19.91
Soyabean	0	0	0
Total Oilseeds	6.22	6.15	7.53
Other crops			
Sugarcane	478.84	471.24	345.24
Potato	135.94	178.72	156.3
Tobacco	63	44.83	60
Jute	0	0	0
Cotton	0		
Sanai	4.28	4.56	3.6
Turmeric	17.44	36.77	31.64

Source Stastical Abstract, 2010

Table 19: Blockwise Operational Landholding

District Name	Block Name	Less than 0.50		0.50 to 1.00		1.00 to 2.00		2.00 to 4.00		4.00 to10		10 or more		Total Number	
		Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
Agriculture Census 1995-96															
Amethi	Shukul Bazar	17018	4056	5697	3856	2271	2855	684	1867	131	661	8	89	25809	13384
	Jagdishpur	20094	5158	6289	4093	2297	3027	717	1955	119	643	5	74	29521	14950
	Singhpur	13980	2929	6503	3870	3712	4739	1396	3513	305	1597	12	168	25908	16816
Barabanki	Trivediganj	15723	4293	6213	4273	3570	4790	1390	3718	327	1840	9	249	27232	19163
	Haidargarh	17746	4845	7012	4823	4029	5407	1569	4196	369	2076	10	282	30735	21629
Raebareli	Shivgarh	9485	1768	4403	2333	2571	3903	1035	2353	202	1203	10	130	17706	11690
Total/Avg.	Project Area	94046	23049	36117	23248	18450	24721	6791	17602	1453	8020	54	992	156911	97632
Agriculture Census 2000-01															
Amethi	Shukul Bazar	16418	5223	5579	3661	2181	2587	628	1748	103	524	4	55	24913	13798
	Jagdishpur	19385	6642	6158	3886	2206	2743	658	1830	94	509	3	46	28504	15656
	Singhpur	12402	3424	5798	3929	3187	4278	1334	3622	372	2005	9	119	23102	17377
Barabanki	Trivediganj	15383	4590	5482	4062	3003	4031	1058	2782	232	1244	11	186	25169	16895
	Haidargarh	17362	5180	6187	4585	3389	4550	1195	3140	262	1403	13	211	28408	19069
Raebareli	Shivgarh	8414	2067	3925	2368	2208	3523	989	2426	247	1511	7	92	15790	11987
Total/Avg.	Project Area	89364	27126	33129	22491	16174	21712	5862	15548	1310	7196	47	709	145886	94782

Source: Planning Commission Uttar Pradesh, Agriculture Census, 1995-96 & 2000-01 (Table 24)

Table 20: Blockwise Irrigation Intensity in the district (in hectares)

District Name	Block Name	Year 2000-01			Year 2005-06			Year 2008-09		
		Gross irrigated area	Net irrigated area	Irrigation Intensity	Gross irrigated area	Net irrigated area	Irrigation Intensity	Gross irrigated area	Net irrigated area	Irrigation Intensity
Amethi	Shukul Bazar	11391	7712	147.7	13527	8279	163.4	13898	8730	159.2
	Jagdishpur	9498	7040	134.9	12308	7553	163.0	12659	7984	158.6
	Singhpur	18229	15419	118.2	20312	11113	182.8	20835	13119	158.8
Barabanki	Trivediganj	25979	14312	181.5	25676	14423	178.0	27070	14348	188.7
	Haidargarh	23767	17063	139.3	25584	14324	178.6	27102	14366	188.7
Raebareli	Shivgarh	17059	11365	150.1	17308	9788	176.8	17754	10119	175.5
Total/Avg.	Project Area	105923	72911	145.3	114715	65480	175.2	119318	68666	173.8

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2010 (Table 17)

Table 21: Irrigation Infrastructure

Blockwise 2000-01

District Name	Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Ground pumpset (No.)	Boring pumpset (No.)	Private tubewell (No.)	Bandhi (Hect)	Hose const. (No.)	Gul const. (km)
Amethi	Shukul Bazar	1	1	0	0	0	60	850	0	0	0
	Jagdishpur	0	0	0	0	0	61	850	0	0	0
	Singhpur	196	11	305	301	16	2933	359	0	0	0
Barabanki	Trivediganj	25	0	108	124	4	1375	90	0	0	0
	Haidargarh	120	0	87	43	1	3392	106	0	0	0
Raebareli	Shivgarh	141	3	28	24	2	2479	137	0	0	0
Total/Avg.	Project Area	483	15	528	492	23	10300	2392	0	0	0

Blockwise 2005-06

District Name	Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
						Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Amethi	Shukul Bazar	73	13	0	0	98	4238	45	4381	0
	Jagdishpur	115	28	0	0	671	5092	7	5770	1
	Singhpur	196	8	1151	0	83	4063	42	4188	0
Barabanki	Trivediganj	138	0	0	0	99	4647	55	4801	0
	Haidargarh	183	0	0	0	163	3302	19	3484	1
Raebareli	Shivgarh	141	3	0	0	29	3759	26	3814	0
Total/Avg.	Project Area	846	52	1151	0	1143	25101	194	26438	2

Blockwise 2008-09

District Name	Block Name	Canal Length (Km)	Govt. Tubewell (No.)	Permanent wells (No.)	Rahat (No.)	Pumpsets				Ground pumpset (No.)
						Electricity Run (No.)	Diesel Run (No.)	Other (No.)	Total (No.)	
Amethi	Shukul Bazar	73	13	0	0	104	4390	45	4539	0
	Jagdishpur	115	29	0	0	690	5275	7	5972	2
	Singhpur	187	7	1454	0	83	4206	42	4331	0
Barabanki	Trivediganj	138	0	0	0	146	5765	92	6003	4
	Haidargarh	183	2	0	0	235	4008	32	4275	7
Raebareli	Shivgarh	141	2	0	0	29	4065	26	4120	0
Total/Avg.	Project Area	837	53	1454	0	1287	27709	244	29240	13

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2010 (Table 23)

Table 22: Blockwise total area (hect.) irrigated by different sources in the district

District Name	Block Name	Canals	Tubewell		Wells	Ponds	Others	Total
			Public	Private				
Blockwise 2000-01								
Amethi	Shukul Bazar	0	5	2	4	0	0	11
	Jagdishpur	0	4	2	4	0	1	11
	Singhpur	11417	89	3880	0	33	0	15419
Barabanki	Trivediganj	13896	0	361	27	0	28	14312
	Haidargarh	15815	0	1106	71	14	57	17063
Raebareli	Shivgarh	8462	9	2845	0	49	0	11365
Total/Avg.	Project Area	49590	107	8196	106	96	86	58181
Blockwise 2005-06								
Amethi	Shukul Bazar	3017	129	5117	7	9	0	8279
	Jagdishpur	2818	93	4631	4	7	0	7553
	Singhpur	9883	51	1179	0	0	0	11113
Barabanki	Trivediganj	8238	160	6010	13	0	2	14423
	Haidargarh	9550	0	4733	40	1	0	14324

Raebareli	Shivgarh	8412	363	1007	0	6	0	9788
Total/Avg.	Project Area	41918	796	22677	64	23	2	65480
Blockwise 2008-09								
Amethi	Shukul Bazar	3277	133	5310	6	8	0	8734
	Jagdishpur	3056	97	4826	5	0	0	7984
	Singhpur	10241	35	2841		0	2	13119
Barabanki	Trivediganj	8785	79	5484	0	0	0	14348
	Haidargarh	10185	0	4179	1	1	0	14366
Raebareli	Shivgarh	9390	0	723		5	1	10119
Total/Avg.	Project Area	44934	344	23363	12	14	3	68670

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2010 (Table 18)

Table 23: Per capita Annual food grain availability (in Kilogram)

Name of crop	2000-01			2005-06			2008-09		
	Production in (in metric tonnes)	Total Population (Census 1991)	Per capita food grain availability in Kilogram	Production in (in metric tonnes)	Total Population (Census 2001)	Per capita food grain availability in Kilogram	Production in (in metric tonnes)	Total Population (Census 2001)	Per capita food grain availability in Kilogram
District: Barabanki									
Rice	282919	2078512	136.12	443060	2673581	165.72	349523	2673581	130.73
Wheat	373586	2078512	179.74	480955	2673581	179.89	492381	2673581	184.17
Barley	1174	2078512	0.56	477	2673581	0.18	168	2673581	0.06
Jwar	3203	2078512	1.54	1965	2673581	0.73	1811	2673581	0.68
Millet	1276	2078512	0.61	1301	2673581	0.49	1196	2673581	0.45
Maize	8426	2078512	4.05	8398	2673581	3.14	801	2673581	0.30
Marhuva	0	2078512	0.00		2673581	0.00		2673581	0.00
Sanva	46	2078512	0.02	11	2673581	0.00	1	2673581	0.00
Koda	511	2078512	0.25	337	2673581	0.13	112	2673581	0.04
Cocoon	2	2078512	0.00		2673581	0.00		2673581	0.00
Kutki	0	2078512	0.00		2673581	0.00		2673581	0.00
Total Dhaan	671143	2078512	322.90	936504	2673581	350.28	845993	2673581	316.43
Urad	3690	2078512	1.78	4943	2673581	1.85	5068	2673581	1.90
Moong	48	2078512	0.02	31	2673581	0.01	21	2673581	0.01
Masoor	17672	2078512	8.50	20224	2673581	7.56	13552	2673581	5.07
Gram	3295	2078512	1.59	865	2673581	0.32	801	2673581	0.30
Pea	3935	2078512	1.89	3741	2673581	1.40	3352	2673581	1.25
Arhar	5771	2078512	2.78	4972	2673581	1.86	2975	2673581	1.11
Moth	1	2078512	0.00		2673581	0.00		2673581	0.00
Total Pulses	34412	2078512	16.56	34776	2673581	13.01	25769	2673581	9.64
Total Food (Pulse)	705555	2078512	339.45	971280	2673581	363.29	871762	2673581	326.07
Lahi / Sarson	8097	2078512	3.90	11862	2673581	4.44	9014	2673581	3.37
Alsi	20	2078512	0.01	15	2673581	0.01	7	2673581	0.00
Til	34	2078512	0.02	40	2673581	0.01	25	2673581	0.01
Rendi	0	2078512	0.00		2673581	0.00		2673581	0.00
Groundnut	323	2078512	0.16	725	2673581	0.27	464	2673581	0.17
Sunflower	20	2078512	0.01	3	2673581	0.00	4	2673581	0.00
Soyabean	0	2078512	0.00		2673581	0.00		2673581	0.00
Total Oilseeds	8494	2078512	4.09	12645	2673581	4.73	9514	2673581	3.56
Sugarcane	856535	2078512	412.09	866209	2673581	323.99	593525	2673581	222.00
Potato	277877	2078512	133.69	245134	2673581	91.69	185564	2673581	69.41
Tobacco	824	2078512	0.40	227	2673581	0.08	129	2673581	0.05
Cotton	0	2078512	0.00	0	2673581	0.00	0	2673581	0.00
Sanai	0	2078512	0.00	0	2673581	0.00	0	2673581	0.00
Turmeric	17	2078512	0.01	0	2673581	0.00	0	2673581	0.00

Table 23: Per capita Annual food grain availability (in Kilogram)

Name of crop	2000-01			2005-06			2008-09		
	Production in (in metric tonnes)	Total Population (Census 1991)	Per capita food grain availability in Kilogram	Production in (in metric tonnes)	Total Population (Census 2001)	Per capita food grain availability in Kilogram	Production in (in metric tonnes)	Total Population (Census 2001)	Per capita food grain availability in Kilogram
District: Raebareli									
Rice	209971	2310074	90.89	282467	2872335	98.34	318375	2872335	110.84
Wheat	382444	2310074	165.55	380679	2872335	132.53	479250	2872335	166.85
Barley	7115	2310074	3.08	5128	2872335	1.79	6383	2872335	2.22
Jwar	11338	2310074	4.91	10495	2872335	3.65	6843	2872335	2.38
Millet	2101	2310074	0.91	1063	2872335	0.37	1317	2872335	0.46
Maize	105	2310074	0.05	209	2872335	0.07	151	2872335	0.05
Marhuva	82	2310074	0.04		2872335	0.00		2872335	0.00
Sanva	171	2310074	0.07	28	2872335	0.01	24	2872335	0.01
Koda	1	2310074	0.00	0	2872335	0.00	0	2872335	0.00
Cocoon	0	2310074	0.00		2872335	0.00		2872335	0.00
Kutki	0	2310074	0.00		2872335	0.00		2872335	0.00
Total Dhaan	613328	2310074	265.50	680069	2872335	236.77	812343	2872335	282.82
Urad	7131	2310074	3.09	6890	2872335	2.40	6552	2872335	2.28
Moong	455	2310074	0.20	484	2872335	0.17	426	2872335	0.15
Masoor	144	2310074	0.06	231	2872335	0.08	192	2872335	0.07
Gram	8975	2310074	3.89	8407	2872335	2.93	7473	2872335	2.60
Pea	4831	2310074	2.09	4764	2872335	1.66	4022	2872335	1.40
Arhar	16630	2310074	7.20	9149	2872335	3.19	4798	2872335	1.67
Moth	1	2310074	0.00		2872335	0.00		2872335	0.00
Total Pulses	38167	2310074	16.52	29925	2872335	10.42	23463	2872335	8.17
Total Food (Pulse)	651495	2310074	282.02	709994	2872335	247.18	835806	2872335	290.98
Lahi / Sarson	5159	2310074	2.23	5492	2872335	1.91	6886	2872335	2.40
Alsi	108	2310074	0.05	97	2872335	0.03	40	2872335	0.01
Til	232	2310074	0.10	290	2872335	0.10	475	2872335	0.17
Rendi	0	2310074	0.00		2872335	0.00		2872335	0.00
Groundnut	1833	2310074	0.79	1755	2872335	0.61	1375	2872335	0.48
Sunflower	74	2310074	0.03	484	2872335	0.17	50	2872335	0.02
Soyabean	0	2310074	0.00	0	2872335	0.00	0	2872335	0.00
Total Oilseeds	7406	2310074	3.21	8118	2872335	2.83	8826	2872335	3.07
Sugarcane	214856	2310074	93.01	234253	2872335	81.55	150007	2872335	52.22
Potato	80202	2310074	34.72	106177	2872335	36.97	83558	2872335	29.09
Tobacco	63	2310074	0.03	5	2872335	0.00	6	2872335	0.00
Cotton	0	2310074	0.00	0	2872335	0.00	0	2872335	0.00
Sanai	8	2310074	0.00	14	2872335	0.00	4	2872335	0.00
Turmeric	9	2310074	0.00	162	2872335	0.06	38	2872335	0.01

Source: http://updes.up.nic.in/spatrika/engspatrika/select_distt_yr.asp

Table 24: Blockwise agricultural labour

District Name	Block Name	Year 1991			Year 2001		
		Agricultural labourers	Total workers	% of Agricultural labour	Agricultural labourers	Total workers	% of Agricultural labour
Amethi	Shukul Bazar	8669	37635	23.0	5553	45245	12.3
	Jagdishpur	10982	42050	26.1	7546	58779	12.8
	Singhpur	10878	46221	23.5	8609	60063	14.3
Barabanki	Trivediganj	6975	44816	15.6	5771	58604	9.8
	Haidargarh	12550	51566	24.3	8678	58602	14.8
Raebareli	Shivgarh	4619	28845	16.0	4539	37397	12.1
Total/Avg.	Project Area	54673	251133	21.8	40696	318690	12.8

Source: Planning Commission Uttar Pradesh 1991 & 2001 (Table- 8)

Table 25: Fertilizers Consumption per hectare of area sown (kg)

District Name	Block Name	Nitrogen	Phosphorus	Potash	Total
2000-01 (Kg/Ha)					
Amethi	Shukul Bazar	76.84	18.26	2.48	97.58
	Jagdishpur	73.87	17.71	2.58	94.16
	Singhpur	77.17	24.29	1.30	102.76
Barabanki	Trivediganj	135.84	41.36	6.76	183.96
	Haidargarh	94.23	48.24	5.42	147.88
Raebareli	Shivgarh	66.82	17.70	1.17	85.69
Total/Avg.	Project Area	87.46	27.92	3.29	118.67
2005-06 (Kg/Ha)					
Amethi	Shukul Bazar	81.51	21.32	5.34	108.17
	Jagdishpur	88.23	23.21	5.40	116.84
	Singhpur	79.29	29.89	3.06	112.24
Barabanki	Trivediganj	111.70	36.70	13.33	161.72
	Haidargarh	87.69	45.46	12.95	146.09
Raebareli	Shivgarh	71.02	22.55	3.11	96.68
Total/Avg.	Project Area	86.57	29.85	7.20	123.62
2008-09 (Kg/Ha)					
Amethi	Shukul Bazar	107.77	22.71	5.25	135.72
	Jagdishpur	114.53	23.91	5.12	143.57
	Singhpur	133.78	43.96	6.59	184.33
Barabanki	Trivediganj	179.04	35.58	6.08	220.70
	Haidargarh	137.85	47.84	6.66	192.34
Raebareli	Shivgarh	152.36	46.70	7.69	206.75
Total/Avg.	Project Area	137.56	36.78	6.23	180.57

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2010 (Table 26)

Table 26: Districtwise facilities for Livestock

District Name	Block Name	Veterinary hospital (No.)	Animal devl. centre (No.)	Artificial fertility centre (No.)	Artificial fertility subcentre (No.)`	Animal breeding farm(No.)`	Sheep devl. Centre (No.)	Pig devl. Centre (No.)	Piggery unit (No.)	Poultry unit (No.)
Blockwise 2000-01										
Amethi	Shukul Bazar	2	5	2	4	0	0	1	1	0
	Jagdishpur	2	4	2	4	0	1	0	0	0
	Singhpur	3	4	5	0	0	1	1	0	0
Barabanki	Trivediganj	3	10	6	0	0	0	0	0	0
	Haidargarh	4	12	15	0	0	0	0	0	0
Raebareli	Shivgarh	1	4	4	0	0	0	1	0	0
Total/Avg.	Project Area	15	39	34	8	0	2	3	1	0
Blockwise 2005-06										
Amethi	Shukul Bazar	2	0	5	3	0	0	1	1	0
	Jagdishpur	2	0	4	3	0	1	0	0	0
	Singhpur	3	0	1	4	0	1	1	0	0
Barabanki	Trivediganj	3	0	10	13	0	0	0	0	0
	Haidargarh	4	0	12	16	0	0	0	0	0
Raebareli	Shivgarh	1	1	2	3	0	0	1	0	0
Total/Avg.	Project Area	15	1	34	42	0	2	3	1	0
Blockwise 2008-09										
Amethi	Shukul Bazar	2	0	5	3	0	0	0	1	0
	Jagdishpur	2	0	4	3	0	0	0	0	0
	Singhpur	3	0	1	4	0	1	1	0	0
Barabanki	Trivediganj	3	0	10	13	0	0	0	0	0
	Haidargarh	3	0	12	16	0	0	0	0	0
Raebareli	Shivgarh	1	1	2	3	0	0	1	0	0
Total/Avg.	Project Area	14	1	34	42	0	1	2	1	0

Source: Planning Commission Uttar Pradesh 2001 (Table - 30)

Table 27: Blockwise Livestock Population, 1997

Animal census 1997

District Name	Block Name	Bovine (Desi)				Bovine (cross breed)				Total Bovine
		More than 3 yrs (Male)	More than 3 yrs (Female s)	Calf (Males & Females)	Total	More than 2,5 yrs (Male)	More than 2,5 yrs (Female)	Calf (Males & Females)	Total	
Amethi	Shukul Bazar	3483	2717	16881	23081	8	651	380	1039	24120
	Jagdishpur	10425	7523	11178	29126	200	539	1023	1762	30888
	Singhpur	12556	6398	5426	24380	316	220	201	737	25117
Barabanki	Trivediganj	9818	7777	8208	25803	4665	2645	3111	10421	36224
	Haidargarh	5649	5018	6798	17465	2079	1057	1912	5048	22513
Raebareli	Shivgarh	24681	10637	10883	46201	135	248	361	744	46945
Total/Avg.	Project Area	66612	40070	59374	166056	7403	5360	6988	19751	185807

Animal census 2003

District Name	Block Name	Bovine (Desi)				Bovine (cross breed)				Total Bovine
		More than 3 yrs (Male)	More than 3 yrs (Female s)	Calf (Males & Females)	Total	More than 2,5 yrs (Male)	More than 2,5 yrs (Female)	Calf (Males & Females)	Total	
Amethi	Shukul Bazar	3483	2717	16881	23081	8	651	380	1039	24120
	Jagdishpur	10425	7523	11178	29126	200	539	1023	1762	30888
	Singhpur	4469	6790	5999	17258	174	333	263	770	18028
Barabanki	Trivediganj	5958	9714	7394	23066	628	1245	1116	2989	26055
	Haidargarh	3427	6266	6122	15815	368	838	728	1934	17749
Raebareli	Shivgarh	0	0	0	0	0	0	0	0	0
Total/Avg.	Project Area	27762	33010	47574	108346	1378	3606	3510	8494	116840

Source: Planning Commission Uttar Pradesh 1997 & 2003 (Table - 29)

Table 27: Blockwise Livestock Population, 1997

Animal census 1997

District Name	Block Name	Mahish Jaatiya				Sheep			Total goat (Male & Female)	Total (horse & pony)
		More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total	Pure	Cross breed	Total		
Amethi	Shukul Bazar	143	2147	3382	5672	234	210	444	7474	132
	Jagdishpur	432	3815	5590	9837	565	0	565	8713	198
	Singhpur	2208	5498	4059	11765	576	75	651	6538	193
Barabanki	Trivediganj	981	7435	8492	16908	1630	678	2308	13977	237
	Haidargarh	788	9249	8901	18938	80	150	230	16204	346
Raebareli	Shivgarh	838	11000	9830	21668	943	78	1021	15098	443
Total/Avg.	Project Area	5390	39144	40254	84788	4028	1191	5219	68004	1549

Animal census 2003

District Name	Block Name	Mahish Jaatiya				Sheep			Total goat (Male & Female)	Total (horse & pony)
		More than 3 yrs (Male)	More than 3 yrs (Females)	Calf (Males & Females)	Total	Pure	Cross breed	Total		
Amethi	Shukul Bazar	143	2147	3382	5672	234	210	444	7474	132
	Jagdishpur	432	3815	5590	9837	565	0	565	8713	198
	Singhpur	1943	5003	3815	10761	313	15	328	7159	123
Barabanki	Trivediganj	579	8873	9007	18459	1083	122	1205	11880	108
	Haidargarh	464	11037	9441	20942	53	27	80	13773	157
Raebareli	Shivgarh	737	10020	9240	19997	501	15	516	16489	281
Total/Avg.	Project Area	4298	40895	40475	85668	2749	389	3138	65488	999

Source: Planning Commission Uttar Pradesh 1997 & 2003 (Table - 29)

Table 27: Blockwise Livestock Population, 1997

Animal census 1997

District Name	Block Name	Pig			Other animals	Total animals	Total cock, hen & chicks	Other poultry	Total poultry
		Pure	Cross bred	Total					
Amethi	Shukul Bazar	3437	2343	5780	158	43780	2742	27	2769
	Jagdishpur	8363	5990	14353	276	64830	1160	1715	2875
	Singhpur	4873	806	5679	45	49988	2161	99	2260
Barabanki	Trivediganj	10672	4286	14958	596	85208	7009	168	7177
	Haidargarh	10402	2851	13253	482	71966	8689	178	8867
Raebareli	Shivgarh	8007	668	8675	278	94128	9552	681	10233
Total/Avg.	Project Area	45754	16944	62698	1835	409900	31313	2868	34181

Animal census 2003

District Name	Block Name	Pig			Other animals	Total animals	Total cock, hen & chicks	Other poultry	Total poultry
		Pure	Cross bred	Total					
Amethi	Shukul Bazar	3437	2343	5780	158	43780	2742	27	2769
	Jagdishpur	8363	5990	14353	276	64830	1160	1715	2875
	Singhpur	3955	269	4224	23	40646	2170	133	2303
Barabanki	Trivediganj	6307	676	6983	278	64968	4335	42	4377
	Haidargarh	6147	451	6598	226	59525	5374	45	5419
Raebareli	Shivgarh	6493	225	6718	142	44143	9404	913	10317
Total/Avg.	Project Area	34702	9954	44656	1103	317892	25185	2875	28060

Source: Planning Commission Uttar Pradesh 1997 & 2003 (Table - 29)

Table 28: Reservoir Fish Production

District Name	Block Name	Departmental Reservoir			Distributi on of Angulikao (in	Revenue from distributed Angulikao	Private Reservoir		
		No.	Area (Hectare)	Productio n (quintal)			No.	Area (Hectare)	Production (quintal)
Blockwise 2001-02									
Amethi	Shukul Bazar	0	-	-	850	-	0	-	-
	Jagdishpur	0	-	-	850	-	0	-	-
	Singhpur	0	-	-	981	-	0	-	-
Barabanki	Trivediganj	0	-	-	846	-	0	-	-
	Haidargarh	0	-	-	1430	-	0	-	-
Raebareli	Shivgarh	0	-	-	814	-	0	-	-
Total/Avg.	Project Area	0	-	-	5771	-	0	-	-
Blockwise 2005-06									
Amethi	Shukul Bazar	0	-	-	900	63000	26	20	48
	Jagdishpur	0	-	-	850	59500	26	16	63
	Singhpur	0	-	-	150	10500	15	10	237
Barabanki	Trivediganj	0	-	-	70	4900	2	-	25
	Haidargarh	0	-	-	355	25550	2	1	40
Raebareli	Shivgarh	0	-	-	392	27440	7	4	90
Total/Avg.	Project Area	0	-	-	2717	190890	78	51	503
Blockwise 2009-10									
Amethi	Shukul Bazar	0	-	-	80	680	32	13	39
	Jagdishpur	0	-	-	100	850	34	14	40
	Singhpur	0	-	-	77	6545	15	10	278
Barabanki	Trivediganj	0	-	-	140	11900	2	1	40
	Haidargarh	0	-	-	104	8840	2	1	45
Raebareli	Shivgarh	0	-	-	110	9000	7	4	92
Total/Avg.	Project Area	0	-	-	611	37815	92	43	534

Source: Planning Commission Uttar Pradesh 2001, 2006 & 2009 (Table-31)

http://updes.up.nic.in/spatrika/engspatrika/select_distt_yr.asp

Soil Quality Status

District wise Micro-Nutrient Status-2005-06 to 2007-2008														
Sl.No.	District	Block	No. of Samples	Sulphur		No. of Samples	Element Index				Level			
				Element Index	Level		Zinc	Copper	Iron	Mn	Zinc	Copper	Iron	Magzine
1	Raebareli	Shivgarh	61	1.44	D	69	2.09	2.58	2.32	2.94	M	S	M	S
2	Amethi	Singhpur	115	1.32	D	131	1.95	2.31	2.36	2.59	M	M	M	S
		Jagdishpur	120	1.80	M	120	1.79	1.62	1.78	1.77	M	D	M	M
		Sukulbazar	29	1.48	D	29	1.48	1.77	1.46	1.84	D	M	D	M
3	Barabanki	Haidergarh	196	1.76	M	196	1.94	2.05	1.90	1.98	M	M	M	M
		Trivediganj	278	1.64	D	278	2.00	1.66	2.02	1.72	M	D	M	M
District wise Micro-Nutrient Status-2009-10														
Sl.No.	District	Block	No. of Samples	Sulphur		No. of Samples	Element Index				Level			
				Element Index	Level		Zinc	Copper	Iron	Magzine	Zinc	Copper	Iron	Magzine
1	Raebareli	Shivgarh	53	1.49	D	53	2.10	2.60	2.40	2.80	M	S	M	S
		Tiloi	234	1.47	D	234	2.40	2.52	2.60	3.00	M	S	S	S
2	Amethi	Singhpur	68	1.22	D	68	2.10	2.60	2.70	3.00	M	S	S	S
		Jagdishpur	95	1.84	M	95	1.90	2.12	2.02	2.73	M	M	M	S
		Sukulbazar	101	2.00	M	101	1.91	2.43	1.98	2.85	M	M	M	S
3	Barabanki	Haidergarh	160	1.84	M	160	1.60	2.39	2.23	2.41	D	M	M	M
		Trivediganj	140	1.71	M	140	1.66	2.13	2.27	2.30	D	M	M	M
	Note:	M	Marginal											
		S	Sufficient											
		D	Difficient											

District wise NPK Status Haidergarh Branch-2009-10

Sl. No.	District	Block Name	No. of Samples	Element Index			Fertility Level		
				N	P	K	N	P	K
1	Raebareli	Shivgarh	327	1.47	1.38	3.82	VL	VL	H
2	Amethi	Singhpur	268	1.35	1.33	3.75	VL	VL	H
		Jagdishpur	1444	1.81	1.52	3.65	L	VL	H
		Sukulbazar	1314	2.16	1.85	2.86	L	L	M
		Haidergarh	1200	1.97	1.66	2.93	L	VL	M
3	Barabanki	Trivediganj	1228	1.97	1.60	2.84	L	VL	M

Note:	VL	Very Low
	L	Low
	M	Medium
	H	High

Carbon Status of Haidergarh Branch-2009-10

Sl. No.	District	Block Name	No. of Samples	Biological Carbon	
				Element Index	Fertility Level
1	Raebareli	Shivgarh	327	1.47	VL
2	Amethi	Singhpur	268	1.35	VL
		Jagdishpur	1444	1.81	L
		Sukulbazar	1314	2.16	L
		Haidergarh	1200	1.97	L
3	Barabanki	Trivediganj	1228	1.97	L
Note:			VL	Very Low	
			L	Low	

Annexure 4.3: Details of Main Canals & Ground Water in LGC

Ground Water Availability in Lower Ganga Canal System

Sl. No.	District	Annual Replenishable Groundwater Resource					Natural Discharge during non-monsoon Season	Net Annual Ground water Availability
		Monsoon Season		Non-monsoon Season		Total		
		Recharge from rainfall	Recharge from other sources	Recharge from rainfall	Recharge from other sources			
Year 2004								
1	Auraiya	30736	18806	2440	27453	79435	6396	73039
2	Etah	63774	14639	11101	35911	125424	12542	112881
3	Etawah	30473	17072	2517	27186	77248	6413	70835
4	Farrukhabad	35019	11389	3249	18509	68166	3835	64331
5	Fatehpur	69339	20555	6142	42878	138914	9538	129376
6	Firozabad	34663	10397	6519	26131	77709	7173	70537
7	Kannauj	35074	10387	3346	29425	78232	7171	71061
8	Kanpur Dehat	51749	13725	4026	26667	96167	7059	89108
9	Kanpur Nagar	48148	17906	3454	31221	100728	8067	92662
10	Kasganj	NA	NA	NA	NA	NA	NA	NA
11	Kaushambi	28808	7696	1295	7358	45158	3313	41845
12	Mainpuri	39343	15596	7361	30377	92678	7566	85112
	LGC Total	467126	158168	51450	303116	979859	79073	900787
	State Total (ham)	3862644	1195084	563646	2013843	7635216	616926	7018290
	State Total (bcm)	38.63	11.95	5.64	20.14	76.35	6.17	70.18
Year 2009								
1	Auraiya	27575	11995	0	24839	64410	6441	57969
2	Etah	37178	14598	6614	21841	80231	8023	72208
3	Etawah	34523	13700	2387	26199	76809	7053	69756
4	Farrukhabad	41796	5229	4466	9879	61370	5172	56198
5	Fatehpur	61720	18877	0	26891	107488	6584	100904
6	Firozabad	32499	13226	6215	23870	75810	6152	69658
7	Kannauj	33862	10075	4123	21509	69569	5444	64125
8	Kanpur Dehat	54613	11689	0	22759	89060	8108	80952
9	Kanpur Nagar	46816	12432	0	24024	83272	7591	75681
10	Kasganj	30156	10702	5027	16261	62147	6215	55932
11	Kaushambhi	31076	6101	1295	6411	44883	3950	40933
12	Mainpuri	39291	14615	7655	31395	92956	7569	85387
	LGC Total	471105	143239	37782	255878	908005	78302	829703
	State Total (ham)	4077837	1136994	541075	1769552	7525458	668004	6857454
	State Total (bcm)	40.78	11.37	5.41	17.7	75.25	6.68	68.57

Source: Central Ground Water Board

Annual Ground Water Draft and Stage of ground water development

Sl. No.	District	Annual Ground Water Draft			Projected demand for Domestic and Industrial uses upto 2025	Net Ground Water Availability for Future Irrigation use	Stage of Ground Water Development (Y.)
		Irrigation	Domestic& Industrial Water Supply	Total			
Year 2004							
1	Auraiya	39645	2311	41955	3026	30368	57
2	Etah	81879	6550	88430	9826	21177	78
3	Etawah	27382	2307	29689	2965	40489	42
4	Faizabad	68602	4699	73302	7795	33675	67
5	Farrukhabad	45661	2299	47961	3104	15565	75
6	Fatehpur	86372	4869	91241	6778	36226	71
7	Firozabad	52724	4049	56773	6073	11739	80
8	Kanpur Dehat	40663	3340	44003	4141	44305	49
9	Kanpur Nagar	58727	3666	62393	5306	28629	67
10	Kasganj	NA	NA	NA	NA	NA	NA
11	Kaushambi	22502	2598	25100	4256	15087	60
12	Mainpuri	64689	4953	69643	7430	12993	82
	LGC Total	588846	41641	630490	60700	290253	66
	State Total (ham)	4536196	342241	4878436	530337	1951757	70
	State Total (bcm)	45.36	3.42	48.78	5.30	19.52	70
Year 2009							
1	Auraiya	40712	2605	43317	3312	13945	75
2	Etah	57117	3413	60530	4620	10471	84
3	Etawah	36713	2440	39153	2900	30143	56
4	Farrukhabad	36398	3104	39502	4225	15574	70
5	Fatehpur	79378	5274	84652	12061	9465	84
6	Firozabad	66297	3791	70088	5142	-1781	101
7	Kannauj	41160	2767	43927	3429	19537	69
8	Kanpur Dehat	51721	3554	55275	4632	24598	68
9	Kanpur Nagar	57709	3331	61040	4259	13713	81
10	Kasganj	40497	2363	42860	2890	12545	77
11	Kaushambhi	29477	3136	32613	5753	5703	80
12	Mainpuri	65549	3942	69491	5784	14054	81
	LGC Total	602728	39720	642448	59007	167967	77
	State Total (ham)	4599580	348728	4948308	536083	1721792	72
	State Total (bcm)	46	3.49	49.48	5.36	17.22	72

Source: Central Ground Water Board

Semi-Critical, Critical and over exploited blocks in Districts of LGC System

District	Semi-Critical		Critical		Over Exploited	
	2004	2009	2004	2009	2004	2009

District	Semi-Critical		Critical		Over Exploited	
	2004	2009	2004	2009	2004	2009
Auraiya	Bidhuna	-	-	-	-	-
Etah	Jalesar	Saket	-	-	Marehra	Markara
	Nidholikalan	Nidhauri Kalan	-	-	Sakeet	-
	-	Aliganj	-	-	-	-
Farrukhabad	Mohamadabad	-	Kamalganj	-	Barhpur	-
Fatehpur	Airawan	Airayan	-	Amauli	-	-
	Deomai	Bahua	-	Haswa	-	-
	-	Deomai	-	Hathgaon	-	-
	-	Khajua	-	Malawan	-	-
	-	Teliyani	-	-	-	-
	-	Vijayeeppur	-	-	-	-
Firozabad	Madnapur	Madanapur	-	-	-	Aron
	Shikohabad	-	-	-	-	Eka
	Tundla	-	Firozabad	-	-	Firozabad
	-	-	-	-	-	Narkhi
	-	-	-	-	-	Tundla
Kannauj	Jalalabad	Kannauj	-	-	-	Jalalabad
	Kannauj	Talgram	-	-	-	-
	Talgram	-	-	-	-	-
Kanpur Nagar	-	Ghatampur	-	Bhitar Gaon	-	-
	-	Sarsaul	-	-	-	-
	Shivrajpur	Shivrajpur	-	-	-	-
Kasganj	-	-	-	-	Kasganj	Kasganj
Kaushambi	Chail	Newada	-	Kara	-	Chail
	-	-	-	Manjhanpur	-	Sirathu
	-	-	-	Moorat Ganj	-	-
Mainpuri	Barnahal	-	-	-	-	Barnahal
	-	-	-	-	-	Mainpuri
Total	15	16	2	8	4	12

Source: Central Ground Water Board

District wise Ground Water Resources Available, Utilization and Stage of Development in Haidergarh Branch Area (2009)

District	Annual Replenishable Ground Water Resources					Natural Discharge during non-monsoon season	Net Annual G/w Availability
	Monsoon Season		Non-Monsoon Season		Total		
	Recharge from rainfall	Recharge from other sources	Recharge from rainfall	Recharge from other sources			
Barabanki	86140	38678	18101	70064	212983	21298	191685
Raebareli	56314	22463	10683	34227	123686	10890	112796
Amethi	81834	44297	0	50523	176654	15586	161068
Average							

Source: Central Ground Water Board

District	Annual G/W Draft			Projected Demand for Domestic and Industrial uses upto 2025	G/W Availability for future irrigation	Stage of G/W development (%)
	Irrigation	Domestic & Industrial uses	Total			
Barabanki	125096	6891	131987	10203	56386	69
Raebareli	76773	6777	83551	9718	26305	74
Amethi	108346	8113	116459	13344	39378	72
Average						71.12

Source: Central Ground Water Board

Annexure 4.4: Year wise Surface Water Quality Status

Surface Water Quality Lower Ganga Canal Districts

Year	Kannauj U/S (Rajghat)	Kannauj D/S	Bithoor (Kanpur)	Kanpur U/S (Ranighat)	Kanpur D/S (Jajmau Pumping Station)
Fecal Coliform (MPN/100ml)					
2003	919	1478	1022	1089	4911
2004	994	1101	950	939	3484
2005	4300	5471	3611	2813	26167
2006	6243	7314	4000	3543	22857
2007	2033	3389	2151	2633	32889
2008	3567	3080	3125	3190	16818
Biological Oxygen Demand (mg/l)					
2002	2.0	3.0	2.0	2.0	5.0
2003	2.3	3.3	2.6	2.7	5.0
2004	2.7	3.4	2.4	2.3	6.9
2005	2.8	3.0	2.3	1.8	5.2
2006	3.6	3.5	3.3	3.0	6.3
2007	3.4	3.9	2.7	2.9	6.1
2008	3.6	4.1	3.5	3.4	8.3
Dissolve Oxygen (mg/l)					
2002	7.5	7.5	7.6	7.7	6.4
2003	6.4	6.4	6.7	6.9	5.8
2004	6.8	6.8	6.7	6.9	4.6
2005	7.3	6.8	7.3	7	5.8
2006	7.3	7.9	7.6	6.7	3.9
2007	7.8	7.7	7.5	7.7	5.5
2008	7.4	7.1	7.4	7.6	5.6

Source: Central Pollution Control Board

Ground Water Quality Data

Sl. No.	District Name	Block Name	No. of Testing	*Type of Source	Above Permissible Limit																		
					F (mg/l)	Cl (mg/l)	Fe (mg/l)	Mg (mg/l)	pH	Ca (mg/l)	TDS (mg/l)	NO3 (mg/l)	Hardness	SO4 (mg/l)	Tur.NTU	R Cl (mg/l)	Coli. (mg/l)	E-Coli (mg/l)	Cu (mg/l)	As (mg/l)	Alkalinity (mg/l)	Al (mg/l)	Mn (mg/l)
1	AURAIYA	AURAIYA	454	DT, OW	1	-	1	4	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
2	ETAH	NIDHAULI KALAN	97	DT	-	-	-	61	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
3	ETAH	SAKIT	156	DT	-	-	-	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	ETAH	SHITALPUR	22	DT	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	ETAWAH	BADAPURA	505	DT, ST	25	1	1	-	122	-	-	11	1	1	-	1	1	-	-	-	-	-	-
6	ETAWAH	BASREHAR	33	DT, ST	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
7	ETAWAH	BHARTHANA	274	ST	17	-	-	-	24	-	-	-	1	5	-	-	-	-	-	-	-	-	-
8	ETAWAH	JASWANTNAGAR	290	DT, ST & DP	23	-	-	-	97	-	-	1	-	8	26	1	-	-	-	-	-	-	-
9	ETAWAH	MAHEWA	194	DT, ST	5	-	-	-	5	-	-	1	1	-	-	-	-	-	-	-	-	-	-
10	ETAWAH	SAIFAI	30	ST	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	ETAWAH	TAKHA	161	ST	3	1	-	-	4	1	1	-	-	1	-	-	-	-	-	-	-	-	-
12	FARRUKHABAD	KAYAMGANJ	1938	DT	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-
13	FATEHPUR	ARAIN	2036	DP	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	FATEHPUR	ASOYER	2235	ST	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	FATEHPUR	BAHUA	2327	ST	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
16	FATEHPUR	BHITAURA	2511	DT	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	FATEHPUR	BIJAIPUR	2283	ST	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	FATEHPUR	HASWA	2322	ST	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
19	FATEHPUR	THATHA	2452	ST	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	FATEHPUR	KHAJUHA	3282	ST	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	FATEHPUR	TELIYANI	1964	ST	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
22	FIROZABAD	ARAON	286	ST	6	-	1	-	3	-	1	1	-	-	-	-	-	-	-	-	-	-	1

23	FIROZABAD	EKA	224	ST	2	-	1	1	2	-	2	1	-	-	-	-	1	-	-	-	-	-	-
24	FIROZABAD	JASRANA	303	DT, ST	15	-	3	-	3	-	3	1	-	-	-	2	1	-	-	-	-	-	-
25	FIROZABAD	MADANPUR	353	DT,ST	5	2	14	-	5	-	3	-	-	-	-	1	-	-	-	-	-	-	-
26	FIROZABAD	SHIKOHABAD	289	ST	11	-	2	-	4	-	-	-	-	-	-	-	1	-	-	3	-	-	-
27	KANNAUJ	HASERAN	1940	DT, ST	1	-	1	-	7	-	-	3	1	-	2	1	1	-	-	-	-	1	-
28	KANNAUJ	SAURIKH	1295	ST	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-
29	KANNAUJ	UMARDA	2240	DT,ST	1	-	4	-	9	-	-	1	-	-	12	8	1	-	-	-	1	-	-
30	KANPUR DEHAT	MAITHA	425	DT	-	-	-	-	-	-	4	-	1	-	-	-	-	-	-	-	-	-	-
31	KANPUR DEHAT	SARVANKHEDA	452	DT	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32	KANPUR DEHAT	AKBARPUR	549	ST	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33	KANPUR DEHAT	DERAPUR	401	ST	-	-	-	-	2	-	1	-	1	-	-	-	-	-	-	-	-	-	-
34	KANPUR DEHAT	RAJPUR	420	ST	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-
35	KANPUR DEHAT	MALASA	444	ST	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	KANPUR DEHAT	JHINJHAK	484	ST	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
37	KANPUR NAGAR	BHITARGAON	496	DT	1	3	-	-	-	-	-	-	3	-	-	1	-	-	-	-	-	-	-
38	KANPUR NAGAR	BIDHANU	196	DT	1	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
39	KANPUR NAGAR	BILHAUR	1261	DT,ST	2	3	-	-	3	-	-	-	4	-	2	-	1	-	-	-	-	-	-
40	KANPUR NAGAR	GHATAMPUR	1900	DT,ST	2	9	-	-	4	-	4	-	11	-	-	-	-	-	-	-	-	-	-
41	KANPUR NAGAR	KAKWAN	225	DT	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
42	KANPUR NAGAR	KALYANPUR	776	ST	3	4	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
43	KANPUR NAGAR	PATARA	356	DT,ST	1	1	-	-	-	-	1	-	7	-	-	-	-	-	-	-	-	-	-

44	KANPUR NAGAR	SARSAUL	985	ST	-	1	-	-	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-
45	KANPUR NAGAR	SHIVRAJPUR	235	DT,ST	-	10	-	-	-	-	1	-	6	-	-	-	-	-	-	-	-	-	-
46	MAINPURI	GHIROR	78	DT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	MAINPURI	MAINPURI	385	DT	-	-	-	-	5	-	-	-	3	-	-	-	-	-	-	-	-	-	-
48	MAINPURI	BEWAR	103	DT	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	MAINPURI	KARHAL	81	DT	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50	KAUSHAMBI	SIRATHU	2788	ST,DT	2	-	2	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-
51	KAUSHAMBI	NEWADA	2193	ST,DT	5	5	5	-	5	-	4	-	3	2	-	10	-	5	-	-	-	6	5
52	KAUSHAMBI	MANJHANPUR	2444	ST	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
53	KAUSHAMBI	KARA	1702	ST	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
54	KAUSHAMBI	SARSAWAN	2987	ST,DT	-	-	-	-	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-
55	KAUSHAMBI	KAUSHAMBI	2442	DT	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
56	Kanshiram Nagar	PATYALI	60	DT	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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*Deep Tubewell =DT, Openwell = OW, Shallow Tubewell=ST, Delivery Point=DP

Fluoride= F, Chloride= Cl, Iron= Fe, Magnesium=mg, Calcium= Ca, Nitrate= NO3, Sulphates= SO4, Turbidity =Tur,Copper=Cu, Arsenic=As, Residual Chlorine=R Cl Aluminium=Al,Manganese=Mn,Hardness=Ha

Source http://indiawater.gov.in/imisreports/Reports/WaterQuality/rpt_WQM_EntryStatusLabTesting_D.aspx?Rep=0&RP=Y

Annexure 5.1: Findings of FGD

Findings of Focussed Group Discussion in District Kasganj

Irrigation: The present canal system dates back to 1885. The discharge in the canal system is higher than the designed capacity and hence requires remodeling. Increased discharge and lack of wings in the canal has caused seepage, soil erosion and breaching of the canals. Gates in minor canals are also lacking. There is an urgent need for lining of minors, desilting of drains and installation of silt traps. Drainage system need to be improved and developed. Maintenance requires budgetary support which is not adequate and regular at this moment. The issue of cutting of canals is very rampant in the district and any initiatives by the Irrigation Department to regulate it turns out to be futile. 'Seejpaals' who are the field level personnel of the department are often manhandled/threatened by the farmers in case they try to object canal cutting or report the matter for disciplinary action. There are reported instances of pilferage of transformers and oil as well. Paddy is the predominant crop. Crops require 5-6 waterings these days and hence the demand has increased as compared to the available infrastructure. Only two times watering is possible in tail end farms. Tube wells have been installed by the farmers to supplement irrigation needs, especially where canal network is absent or where canal is not able to provide enough water for irrigation (tail end farms).

The de-silting works in the mains and distributaries are carried out by the department whereas those in the minor and feeder channels are done under MGNREGA. Barren land has decreased owing to development of irrigation facilities in the command area. However, area adjacent to Ganga are inaccessible and needs treatment like clearing of shrubs and electrification and restricts public movement. Paddy and wheat are the major crops grown in the district requiring high consumption of water. However due to canal cutting and diversion of water at different points along the canal, the amount of water available for irrigation at the tail end of the canal is very little and only two watering are possible. Installation of tube wells have resulted in dropping of ground water table.

Health: Water and vector borne diseases in areas prone to water logging have been reported. Sanitation related works are handled by the Gram Sabhas in the villages. The health related problems have been incorporated in NRHM. Increased availability of water and water logging may increase threat of water and vector borne diseases. However, application of larvicidal for elimination of mosquito breeding would alleviate the threat. Also access to health services is poor in villages across Ganga River.

Agriculture: Crops are grown in Kharif, Rabi and Zaid season. Rabi and Zaid season needs more watering. Timely availability of water is essential which is not happening currently thus affecting productivity and overall income for farmers. Drainage system is improper. The worst affected are small and marginal farmers. Rabi crops can be sown in time but Kharif crops are affected. Padiyali, Kadarganj and Soron blocks of the district are affected with sodicity (*usar*). The Diversified Agriculture Support Project (DASP) is under last phase of implementation. Therefore, there is a need for supply of gypsum for reclamation of barren land. Pulse crops can increase productivity in Kharif and Zaid season.

Horticulture: Mango, Guava, Citrus fruits and spices are grown primarily in the district. Big farmers do not venture into vegetable farming and it's only done by small and marginal farmers without the provision of adequate water for irrigation. This calls for installation of sprinkler or drip irrigation systems for effective use of water. The old variety of sugarcane grown locally is rejected by sugarcane mills. New varieties of sugarcane needs promotion in the district. Further, the need for a Research Centre on Sugarcane for improving the quality of sugarcane was also highlighted. The head (reach) of the canal has reportedly high ground water level and hence tube wells could be introduced for promoting conjunctive use of ground and surface water. This conjunctive use of surface and ground water could reduce demand of water for irrigation in the head reach leading to increased availability of canal water in tail reach where the demand for canal water is higher (due to lower water levels) but the flow is reduced. The Minor Irrigation Department can consider this proposal which will enable access to water to tail end farms. However, higher cost of pumping water from tube well makes it an unfavorable proposition with farmers in Head Reach who prefer canal for irrigation.

Forests and Wildlife: 'Nilgai' and wild pigs cause extensive damage to standing crops thus resulting in losses and hence farm lands need fencing, etc. to protect their crops. Peas in particular are destroyed by wild pigs. There is a scope for afforestation along the canal.

Co-operatives: It was informed that both KRIBHCO and IFFCO have been successfully functioning in the district. However, it was suggested that the Vaidyanathan Committee recommendations of providing financial support to 'samitis' (farmer's co-operatives) should be followed.

Suggestions: Training should be provided to farmers at the Nyaya Panchayat level for effective use of irrigation water and sensitization towards equal rights to natural resources. Training to address current method of flood irrigation by introducing improved water use efficiency technologies and farming practices is required.

- Will involve women in mobilizing the community against acts like canal cutting etc.
- The Agriculture department will consider involving the Irrigation department in its training so that a comprehensive orientation can be done for the farmers on crop and water management.
- Installation of private tube wells at the head of the canal can prevent canal cutting to a great extent and ensure adequate availability of water at the tail end.
- Water User's Associations to be formed by November and women's participation will be ensured as per the PIM, 2009 Act.

Education: Overall improvement in education has been attributed to schemes in education of State Government and SSA.

Overall women's co-operation is good in agriculture at the village level. They do follow mixed cropping which has been ensured by training of women involved in agriculture. A

case in point is introduction of mustard with wheat solely by women. Women participate in all aspects of farming activities except for irrigation.

Drinking water supply: Kasganj lies in dark zone with respect to ground water zonation based on the ground water table. Drinking water supply is based on hand pumps and tube wells. In urban areas piped water supply is used to provide drinking water whereas in rural areas there are 26 piped water supply schemes and hand pumps (IM II) covering the entire district. This is to prevent water borne diseases. However, some habitations are not covered with water supply schemes and some hand pumps become dysfunctional every year. This indicates lack of services in potable water supply. Treated water is supplied through overhead tanks.

Revenue department: Patwari and Gram Panchayat Secretary should be a part of the training programmes conducted by Irrigation and Agriculture departments for farmers and villagers in general.

Observations: There has been no engagement with PRIs so far in the implementation of irrigation schemes despite a few orientation camps to mobilize villagers stakeholders suggested more camps and joint training sessions should be organized at the Panchayat level. The agriculture and irrigation department officials have been of the common view that the sprinkler system is ideal to tackle the irrigation problem which will also result in effective use of water.

Interaction with community members in Nadrai village including Administrative and Revenue officials:

- There is no immediate benefit of the Lower Ganga Canal (LGC) or Parallel Lower Ganga Canal (PLGC) to the community living next to it. PLGC, a feeder canal system was constructed in 1975 to cater to irrigation needs of Kharif cropping season and is active in this season only.
- The Nadrai aqueduct (also called as *Hazara Nahar*) built on LGC over Kali river was constructed in the year 1889 and requires maintenance (proposed as an activity in UPWSRP - Phase II) and may be declared as a heritage structure.
- The natural drainage has been choked/altered. Roads have been constructed on drains under MGNREGS. Further, under Chakbandi System, earlier drains in farmlands were left as it is. However, under MGNREGS, the drains have been reclaimed by covering with earthen materials. It was opined that if 5% land can be spared, the issue of alteration in drainage system could be addressed.
- Desilting works in Distributaries and minors could be taken up under MGNREGS.

Findings of Focussed Group Discussion in District Etah

- No sewerage facility exists in Etah.
- Groundwater is contaminated in many places in the district.
- Canal cutting is a grave issue affecting irrigation efficiency.

- There has been no training of farmers, villagers and PRIs members so far by the Irrigation Department on issues like water use efficiency and management of conflicts relating to water use for irrigation.

Community meeting in Kartala Gram Panchayat:

- The reason behind cutting of canals is the reduced width of the distributaries and minor canal. Growth of vegetation and deposition of earthen materials along the banks of the distributaries, minors and field channels (*gools*) lead to reduced width, thus resulting in reduced water availability. This prompts farmers to tamper with kulaba system by cutting the minor and increasing the width of gools to get water to the farms. Because of this, tail end farmer get reduced flow of water or no water at all.
- The cleaning and desilting of the distributaries, field channels or gool does not take place regularly – only once a year because of which, the water flow reduces. Because of poor drainage and maintenance of gool, water from farm lands can't be drained properly. Maintenance of Gool does not come under in the jurisdiction of Irrigation Department.
- The discharge in canal network is higher than the original design and capacity of the canal. Nevertheless, the water demand and increased area under agriculture and cropping intensity, make the current canal network not being able to meet the demands.
- Funds available under MGNREGS should and can be used to clean and desilt the distributaries and field channels. The panchayat may take this responsibility after seeking permission from the Irrigation Department.
- Training and sensitization of especially big farmers is important to motivate them for effective water use and desist from actions like canal cutting to ensure equitable distribution of water to all.
- Overall productivity has decreased since the last 10 years. This is mainly due to the fact that water and fertilisers (Urea/DAP) are not available on time. Farmers use Urea/DAP based on their availability and not on the basis of requirement of soil. Vermi compost has been attempted but there is further need for trainings to ensure replication. The low farm income has affected children in pursuing their higher education as it requires money. School education is however taken off through schemes like Sarva Shiksha Abhiyan (SSA) and other programmes.
- Farmers especially the small and marginal ones have used organic fertilizers like compost which have had a good impact on the productivity. However, this has not helped in spreading across to other farmers in a big way.
- There has been an increase in migration due to fall in agricultural productivity and low soil output. People migrate to nearby towns and also to Delhi in search of employment.
- Kartala village has *usar* land.
- Peanut and Shivala has been introduced in the cropping pattern since 2009 by farmers based on their own initiative.

Community members mentioned the use of bricks in gool repair and maintenance. Suggestion was also made to lay PVC pipes to strengthen gool system of irrigation.

3.3.3 Findings of Focussed Group Discussion in District Firozabad

Agriculture: The production has been stagnant during the last five years due to weather related issues. Now it has started showing upward trend in recent times. Only 5% of the total sown area is irrigated and the rest are catered by private tubewells. This has resulted in extensive use of ground water and as such 5 blocks are in the dark zone. There has been very little instance of water logging in the canal irrigated area and paddy is the main crop grown in and around the waterlogged areas and the canal. The waterlogging is seasonal in nature (5-6 months in a year) as long as the canal carries water to its full capacity. There have been on farm demonstration of bio-fertilizers and SRI for paddy under the UPDASP programme which has resulted in many farmers adopting the techniques and benefitting in terms of higher yield. The farmers are now self motivated to use such innovative techniques for increasing productivity. Use of High Yielding Varieties have also resulted in increasing production. There are seed distribution centres at every Nyaya Panchayat level. The quality of soil can be termed as average if not good and farmers have become aware of the deteriorating soil condition in the district and have taken pro-active measures before the situation goes out of control. There are two soil testing laboratories in the district. The levels of nitrogen and potassium in the soil are as desired but the amount of phosphate is lesser than required.

The department has undertaken numerous outreach programmes in the form of *melas*, *goshtis* (open discussion involving scientists and farmers), meetings etc. at the panchayat and block level to spread awareness on agriculture related issues. All this along with supply of good quality inputs have resulted in higher productivity which has translated into higher economic and social status of the farmers. The department ensures at least 30% participation of women in all workshops and discussions as they play a vital role in agriculture. However this is not possible everytime. There has been use of modern technologies like sms and helplines for dissemination of information but *goshtis* have been the most successful medium of reaching out, informing and mobilizing the farming community.

The *Goshtis* are conducted in consultation with the Gram Panchayat. The department works closely with the Panchayat in a couple of areas. For e.g.: selection of beneficiaries. The district is the second highest in the state in terms of potato cultivation as many farmers are increasingly adopting cultivation of potato. There is however no sugarcane farming in the district. The district also holds the 2nd highest record in the state in terms of Bajra production.

In the case of farm mechanization, the district has shown good results as farmers have been provided subsidies to purchase various agricultural implements including tractors. This has been particularly seen in the case of small and marginal farmers the majority of which grows potato. Although modernization of the canal system and improvement in its infrastructure along with setting up of WUAs will contribute to better use of water, the risk of overuse or exploitation still persists and hence subsidies should be provided for the purchase of sprinkler and drip irrigation sets along with on-farm demonstration and trouble shooting support for popularizing the same amongst the cultivators.

Horticulture: The National Horticulture Mission is currently not being implemented in the district but is expected to begin in the next 1-2 years. The department has been successful in growing potato, garlic, chilly, citrus fruits etc. through the farmers. There has been large scale conversion of net sown area under agriculture to horticulture because of potato. There are only two Government owned cold storages for seeds in the entire state. There are a couple of private cold storages but are not reliable and the department does not consider the seed storing process authentic in these cold storages. As regards the agricultural produce there are farmer managed cold storages mainly used for potato which are then sent all over the country. 'Nilgai' affects standing crops in a big way. Many a times they attack in large numbers which makes it difficult for the farmers to handle them and end up losing the crops.

Forest Department: The reason for 'Nilgai' attacking the agricultural fields has been on account of their increasing numbers and corresponding decrease of pasture land. There is around 1600 ha of wasteland as per Forest department record and no wetlands in the district. This has also affected in the spotting of Siberian cranes as they no longer visit the district. The Irrigation, Forest and Soil and Water Conservation departments can work together in tackling the problem of waterlogging.

Energy requirement is met by the villagers from the forests in the form of firewood. The most common species grown catering to firewood availability is *Prosopis juliflora*. They are grown as energy plantation. There are around 25 active Joint Forest Management Committees in the district. Around 3% area of total agricultural land is in the form of bunds which can be utilized through agro-forestry. Forestry results in recycling of nutrients, recharging of ground water whereas agriculture does just the opposite.

Fisheries: Pisciculture in the district is mostly rain fed. Fish production has been hit in the last 6-7 years due to erratic and insufficient average rainfall. However the condition of pisciculture can improve with the co-operation of the Irrigation department. The major varieties of fish reared are Rohu, Katla and Mrigul. Mostly landless farmers take up pisciculture which has helped them to improve their socio-economic status. Further the department provides them training, subsidies etc. which helps them to improve their income.

There is a new proposal by the irrigation department for the next financial year wherein all ponds are to be connected for boosting fish production. Many a times deepening of pond or desilting results in percolation of water through the pond or more sand siltation thus affecting fish production adversely. Hence this activity needs to be done in scientific manner. The water in the waterlogged areas is rich in nutrients and highly suitable for pisciculture. However there have not been any attempts under any programme to channelize that water to a nearby pond which would have solved the waterlogging and connected issues and also would have enabled efficient use of water. This can be taken up under MGNREGS. The banks do not provide adequate loans for pisciculture as the applicants are mostly landless or small farmers who do not have much assets.

Drinking water: Piped water supply system covers most parts of the district. Excess fluoride in groundwater has been found in some blocks closer to Etah district.

Health: Vector borne mostly water borne diseases are prevalent in the rural areas. There is no centralized plant for water treatment in the district. A new sewage treatment plant has been commissioned under UDISSMT and is likely to be ready in the next 1-2 years. This plant will cover almost 80% of the population.

Irrigation dept: The Gram Panchayats can use MGNREGS funds to clean *gullies* (a local term for conduits connecting the distributaries to the field) and minors.

Animal Husbandry and Veterinary Dept: The most prevalent breeds of buffalo is 'murrah' and that of cow is 'jersey'. The Artificial Insemination (AI) programme has been helpful in improving the breed. The milk production has increased almost 10% - 15% in the last 5 yrs. Landless and marginal farmers depend on cattle for their survival. There is enough availability of fodder in the district. Despite high production of milk in the district, its marketing has been an issue. The Paras Co-operative Dairy Federation (PCDF) has been closed which has adversely affected milk marketing.

There has been lack of Veterinary. Personnel in some parts of the district due to connectivity issue. A helpline service at the state level in the name *Jan Suchna Kendra* has been set up. The complaints lodged by villagers are sent via SMS to the veterinary Services at the district level and subsequent actions are taken by informing the personnel at the field level. There is plenty of water and fodder availability in the district because of the canal system.

Other observations:

- Connecting fisheries with irrigation department is of paramount importance.
- Intensification and diversification – both are the focus of all concerned line departments especially agriculture and allied.
- Over exploitation of water and excessive use of chemical fertilizer, are the major issues in the district.
- Massive plantations along canal bunds should be carried out.

3.3.4 Findings of Focussed Group Discussion in District Fatehpur

The meeting held on 07.09.2012 was attended by 19 senior officials of deferent departments including C.D.O., Irrigation, Drainage, Veterinary, Labour, Horticulture, Ground Water, Forest, Fisheries, Agriculture and Jal Nigam. The discussion yielded the following information about the conditions in the District:

Agriculture:

Net sown area	2.30 Lakh hectare
Area sown in Kharif	1.37 Lakh hectare.
Area sown in Rabi	2.30 Lakh hectare.
Area sown in Zaid	0.15 Lakh hectare.

- Main crops in Rabi are Wheat, Gram and Mustard and the Kharif paddy, Jowar and Arhar.
 - Productivity of wheat was 33 Qtl./Ha. and that of Rice 24 Qtl./ Ha. (Paddy 36 Qtl./Ha)
 - Crop Diversification: Banana and chillies are now popular and tissue cultured Banana are available to farmers. There was a demand for establishing Tissue culture Lab in the district.
 - In case canal water is supplied adequately and timely there was possibility to increase sown area of paddy by about 10,000 Ha.
 - In case of timely availability of canal water, productivity of wheat and paddy may increase by 3 to 4 Qtl./Ha.
 - HYV seeds were available to farmers and about 25% of seeds used were hybrid. The procurement centres does not purchase hybrid paddy.
 - Horticulture: Area under fruit trees including Mango, Lemon, Guava and Amla is 9837 Ha. Area under them is increasing by 40-50 Ha per year while under Banana is about 50 Ha.
 - Area under spices such as Chillies, Coriander and Turmeric is 1550 ha.
 - Horticultural produce is normally purchased by middleman and sold by them in mandi where they earn huge margin of profit.
 - National horticulture mission is not working in the district.
 - Irrigation: Canal length is 1409.19 Km.
 - 417 Government Tubewell are in working condition against 667. Thus 250 Tubewell were non functional, either failed or due to depleting water level giving sand or became defunct. Average ground water table is about 40 Mtr. Though in some areas it is between 22 and 27 meters.
- | | |
|--------------------------------|-----|
| Net irrigated to net sown area | 65% |
| Through Private Tubewells | 72% |
| Through canal | 22% |
| Through Govt. Tubewells | 03% |
- About one- third of the sown area is rainfed.
 - Canal work on roster basis but timely water is sometime not available to farmers.
 - Canal water does not reach Tail end in Block Khaga.
 - Desilting of canal is done once a year.
 - Cases of canal cutting and Blocking are large, particularly during Kharif, but have not been reported.
 - Canal operating efficiency in Rabi was reportedly 35% and in Kharif 30%.
 - Outlet were mostly tampered.
 - WUAs were not formed in the district.
 - About 70% of water charges were collected.
 - Availability of Agricultural labour: Agricultural labour is available but their wages have increased significantly due to their employment under MNREGA.

- Health: Common water borne diseases in the district were: Diarrhoea, cholera, Viral fever, gastro- enteritis. While vector borne disease include Filarial, Fluorosis (in Bhitara Block).
- Source of drinking water is India Mark-II handpumps and tubewells.
- There is no drainage system and water logging is common problem.
- There were: 6 CHC, 11 PHC, 2 Hospital, 72 sub-centres and 42 dispensaries in the district. All sub centres work as family welfare centres. This facility is also available at CHCs and PHCs.
- Animal husbandry: the district has 35 Veterinary Hospitals and 52 AI centres.
- Average daily production of milk in the district is 57.36 Qtl. and there are 14 small milk chilling centres but the sale of milk is mostly local and cheap.
- Only about 20% of the required green fodder is available.
- As per BPL survey 2002, 38.21% of rural families were living below poverty line.

3.3.5 Findings of Focussed Group Discussions in District Kaushambi

The meeting held on 08-09-2012 was attended by seven senior officials of different departments including Animal husbandry, Horticulture, Irrigation, Ground Water, Health, Forest and Agriculture. The discussion yielded the following information about the conditions in the district:

- **Agriculture:**

Net sown Area	:	1.34 Lakh ha
Area sown in Kharif	:	0.91 Lakh ha
Area sown in Rabi	:	1.34 Lakh ha
- Main crops in Rabi are wheat, gram and in Kharif Paddy, Jowar and Arhar.
- Productivity of wheat was 28 Qtl/Ha, Gram 15 Qtl/Ha and that of Rice 22 Qtl/Ha.
- Area under wheat was about 91000 Ha, under Paddy about 57000 Ha and under Gram about 13000 Ha.
- If canal water is supplied timely and adequately there is a possibility of an increase in sown area of Paddy by about 25000 Ha.
- The productivity of wheat and paddy may increase by about 3 to 4 Qtl/Ha if canal water is available timely.
- Horticulture:

Area under Banana	:	1922 Ha
Area under Guvava	:	800 Ha
Area under Lemon	:	200 Ha
Area under Spices	:	17470 Ha

(mainly chillies and garlic particularly in Block Newada and Kaushambi)
- Due to poor rains and depleting ground water table (going down by 20 to 25 centimetres per year) many tubewells become ineffective. Many farmers engaged in horticulture are adopting drip irrigation and sprinkler system for which marginal farmers are getting 60% while others were getting 50% subsidy from the government.

- Under Drip irrigation and Sprinkler system it was claimed that water is saved by about 50%, growth of plants is better and produce of fruits is also better.
- Mostly educated farmers were ignoring traditional crops and shifting to orchards/ horticulture as they require less labour (due to MNREGA farmers were not getting labour during crop season.)
- The horticultural crops are more profitable. The production of Banana is approximately 60,000 Kg per Ha and they get price between Rs. 7/- and Rs. 15/- per kg (Average Rs. 10/- per kg) while the production of Guvava is about 12000 kg per ha for which they receive an average price @ Rs. 8/- per kg.
- Irrigation: Canal Length (*Kishanpur Pump Canal*) : 264.88 Km
Government Tubewell : 268
Private Tubewells (*including Pumpsets*) : 18126
- Net irrigated to net sown area : 70%
- Area irrigated through:
Canal : 20.1%
Public Tubewells : 3.7 %
Private Tubewells : 76.2%
- Since Kishanpur is a pump canal timely and adequate supply of water depend on power supply.
- Out of 35 Tail minors, water in 9 minors was not reaching.
- Shortage of power is a serious problem due to which out of 420 cusec only about 200 cusec water is generally available in canal. Out of 7 pumps only 3 to 5 pumps work for about 8 hours per day.
- Fatehpur canal which also serve some part of the district has 25 minors and in 19 of them water was not reaching at tail end.
- Desilting of canal is done before Rabi and Kharif (November and June)
- Cases of canal cutting/blocking are common. Tawan (Penalty) was charged from two groups of farmers and 6 cases under canal Act were filed for Blocking in the last one year.
- Canal operating efficiency was approximately 50%.
- There was no problem of seepage in canal.
- Condition of outlets was reported as satisfactory.
- Roaster system was in practice
- WUAs have not been formed
- Irrigation department is able to collect 100% charges.
- There is no problem of water logging and floods in the district.
- Health: Diarrhoea, Viral fever and gastro-entritis are common water borne diseases and Filaria and Malaria are vector borne diseases in the district.
- For drinking water local as well as India mark-II handpumps, Tubewells and wells are used.
- No proper drainage system exist in rural areas.
- Forest cover was nominal in the district i.e. about 700 Ha.

- Animal Husbandry: There were 15 veterinary hospitals and 24 Artificial Inseminates (AI Centers (Only 6 working while remaining without staff)
- About 1.10 lakh Milch Cattle in the district produce an average of about 4 liter per day/ cattle.
- Out of an average production of 4.40 lakh litre milk per day, procurement by milk plants was about 2.56 lakh and the rest was sold locally.
- Only about 10% of cattle are of cross breed thus more quality breed is required to improve milk production.
- There are 3 chilling plants in the district.
- Fodder seed distribution program has been taken up by Government
- Galghotu, mouth and foot disease, wooden tong and lumpy jaw diseases are commonly found among livestock.
- Awareness about conjunctive use of water among farmers is lacking.
- Only Block Sarsawa and Kara have relatively shallow water table (being canal command area) rest of the areas have deep water table, going down by 20 to 25 centimeters per year.

3.3.6 Findings of Focussed Group discussion in district-Kanpur Nagar

The meeting held on 10-09-2012 was attended by 9 Senior officials of different departments including Agriculture, Irrigation, Forest, Fishereis, Jal Nigam, Tubewell, Horticulture and Ground water. The discussion yielded the following information about condition in the district:

- Agriculture:

Net Sown Area	:	1.99 Lakh Ha
Net Sown Area in Kharif	:	1.70 Lakh Ha
Net Sown Area in Rabi	:	1.76 Lakh Ha
Net Sown Area in Zaid	:	0.30 Lakh Ha
- Productivity of

Wheat	:	34.80 Qtl./Ha
Rice	:	27.08 Qtl./Ha
- No significant diversification of crops is reported.
- In case canal water is supplied adequately and timely, there is a a possibility of an increase of 10% in sown area and 5% in productivity of crops.
- Horticulture: Area under fruit trees such as Mango and Guvava is about 800 Ha.
- Guvava saplings for 20 Ha area have been distributed by the department last year.
- Area under spices including chillies and garlic is about 160 Ha.
- There is no problem in marketing of the horticulture produce.
- There is one Fruit processing unit in the district which process the produce and also impart training in processing.
- Irrigation:

Canal Length	:	1000.19 Km.
CCA Kharif	:	143498 Ha
CCA Rabi	:	143498 Ha

PPA Kharif	:	59552 Ha(41.5%)
PPA Rabi	:	51660 Ha (36.0%)
Govt. Tubewells	:	334 (50 Acre Command Area per TW)
Private Tubewells	:	44470
(including Pumpsets)		

- Canal water available as per roaster.
- Incidence of Canal cutting/blocking were reportedly 50 in a year. For which Tawan (penalty) is recovered in some cases while in other, cases are filed through Deputy Revenue Officer.
- Desilting of Canal is done once in a year, before Rabi.
- About 50% of outlets were reportedly damaged.
- Canal irrigation charges were Rs. 287/- per Ha in Rabi and Kharif both.
- WUAs have not been formed in the district, list of farmers was being prepared for voters list.
- 100% irrigation charges are collected through Tehsil Staff.
- Health: Source of drinking water in rural areas is mostly India Mark-II handpumps and in towns and city is piped water.
- Sanitary conditions in villages are not satisfactory as people generally throw garbage in pits near their home and drains are either damaged or remain unclean and choked.
- Testing of drinking water quality is done at the time of boring for handpumps.
- Average ground water level in the district is about 20 mtr. Tehsil Bilhaur has 9 mtr while Tehsil Kanpur has 25 mtr deep water table.
- Forest: The district has a total of 5378.255 Ha forest area i.e. about 1.5% of total area of the district. It include 300 Ha reserved forest and 3000 Ha along Ganges in Bilhaur Tahsil.
- There were 941 ponds covering 633 Ha area.
- The production of fish was about 7651 Qtl/year and average productivity was 35 Qtl/Ha.
- About half of the rural household in the district (49.08%) were living below poverty line, as per BPL Census 2002.

3.3.7 Findings of Focussed Group discussion in Kannauj district

Agriculture: The southern part of the district is well catered by the irrigation system whereas there is no such system in the northern part. This results in the major part of the district using tube wells/bore wells for irrigation. There used to be a substantial cultivation of sunflower in the district which got ultimately erased due to lack of irrigation and marketing facilities. It was replaced by maize which is equally water demanding and requires 8-9 waterings. However, with improved irrigation and power supply, farmers in certain parts of the district have started growing sunflower. However, the marketing infrastructure still need to be improved.

There is considerably poor awareness amongst farmers regarding the varying quantity of irrigation for varying crops. The agriculture department has conducted a lot of *goshtis* at the Panchayat level to educate farmers on crop specific watering and management of water and there has been some amount of awareness although a lot more need to happen.

The soil quality has deteriorated and there is no nitrogen fixation. Excessive use of chemical fertilizers and poor subsidy for organic manure has only helped in the rampant use of the former for increasing production thus leading to poor soil quality. However, off late some farmers have started using nitrogen fixing crops as part of crop rotation and is carrying on with the practice out of their own interest. The agriculture extension work mostly involves demonstration of improved varieties at the farmer's level. There is almost no use of indigenous varieties of crops and farmers big and small have taken extensively to growing hybrid varieties.

Jal Nigam (water supply): The groundwater table in the canal fed areas are quite satisfactory whereas in the remaining parts of the district, its quite at an alarming level due to excessive overdrawn for irrigation. The Kannauj and Jalalabad blocks are in the dark zone where the water table is alarmingly low. There is a water quality testing lab in the district operational since 2003-04. However Gram Panchayats have also been provided with water testing kits and have been trained to use them to test the quality of water from time to time. Till date no GPs have reported a single sample of water to the department. There are around 13392 sources of India Mark II hand pumps and tubewells across the district. Most parts of the district are catered to by the piped water supply scheme through deep tubewells. The department had implemented a few water conservations schemes like construction of soak pits etc. but was not able to continue the same due to paucity of funds. Also the terrain across the district is plain which does not provide much scope of water harvesting/water conservation works like stop dams etc. except farm ponds, irrigation channels etc. Convergence with MGNREGA is not possible for undertaking water conservation works as under the scheme the material labour ratio is 60:40 whereas the norms of the department is 80:20.

Irrigation: Uncontrolled distribution of water is the major problem in the district despite of its enough availability at present. Issues like rampant breach of canal by farmers, installing illegal conduits etc. results in the water not reaching the tail end. Even if the water reaches, it starts flowing in the reverse direction. Increasing tail end as suggested by farmers is not possible. Almost 80% of irrigation across the district is through tubewells/bore wells. There is a lot of wastage of water. Reclamation of land has resulted in increase of net sown area which implies more demand for irrigation against the existing infrastructure. Every year there is an increase of 10% of reclaimed land and such land cannot be left idle which means irrigation has to be ensured round the year. Also an average of 3-4 crops a year is taken across the district which leads to more demand. All this implies expansion of the existing infrastructure/new systems to cater to the increasing demand.

The Irrigation division in the district has been formed only 11 months back and the officials are in the process of organizing the system. There have been orientation about

the existing condition and the department is also not adequately staffed. There is hardly instances of water logging along the canal side as is the case in other districts.

Fisheries: Tank irrigation is possible in some areas wherein the irrigation channel can help fill farm ponds to promote fisheries. Common problems affecting pisciculture are – siltation and reduction of water holding area. The department caters to the poor by arranging land for them on lease, facilitating bank loans etc. However, poor response of banks towards providing loans and water availability for just 5-6 months has affected pisciculture across the district. Immediate attention is required not only by the fisheries department but by other departments as well to promote fisheries as a viable occupation for the landless and the poor and hence guarantee a source of livelihood.

Horticulture: Drip irrigation can be very useful for potato cultivation keeping in mind the substantial production in the district. The system can save water up to 80%. Sprinkler sets have been distributed and there have been success. However the ample water available for irrigation through tubewells/bore wells and canals do not allow farmers to consider alternative water saving and energy efficient systems of irrigation. Further there have not been enough subsidies for drip and sprinkler irrigation systems which is another reason why farmers do not get inclined towards using it.

Animal Husbandry: Cattle rearing has been in good shape and the supporting factor has been marketing of milk through co-operatives – Government as well as private in the district. However there is no milk processing unit in the district and setting up of one would help in increasing the income of the cattle rearing family. Milk production has not increased substantially due to lack of adequate fodder. The district has to import fodder from other districts. Subsidies for fodder seeds to families having cattle should be provided. A total of 2000 ha of land is under fodder and grassland in the district. Trainings have been organized by the Department for the families rearing cattle on various ways of protection and prevention from diseases. Poor recovery of loans discourages banks from providing further loans to poor families for purchasing hybrid varieties.

Common observations: Overall productivity is constant but production has increased.

As an effect of MGNREGS, agricultural labour has drifted from agricultural work to non-agricultural work which has also affected agricultural production. To counter this extensive mechanization of agriculture has happened. The canal is run as per roster. Hence if water is provided for 15days to the farmers and then the remaining 15 days for filling up of the ponds then water use efficiency and a proper management regime can be followed. However, this does not happen as farmers stake their claim over the water which is meant to fill up the pond and hence adequate water supply to irrigate the ponds cannot take place.

There is a need to regulate number of ponds which can be catered to by the irrigation canals. In the case of excessive number of ponds, justice cannot be done to all of them especially in peak irrigation demand season. The damage to standing crops by *Nilgai* is

very common in the district. They causes heavy damage to the crops. Since they are regarded as a cow by the local population therefore they cannot be killed or culled and hence the menace caused by them becomes uncontrollable.

In UP land registration never used to be in the name of woman although they use to do the maximum work on the field. The situation has changed and registration in the name of woman has become concessional. In all programmes, at least 30% participation of women is ensured. All departments like agriculture, horticulture etc. coordinate and collaborate with the Panchayat level officials and office bearers in implementing its programme. There has however been no exclusive training for the *krishi* (agriculture) *samiti* (committee) of the Gram Panchayat on issues related to agriculture and irrigation so far. They are involved / invited in training programmes / workshops / discussions organize by the departments for the farmers.

Twice a year *Goshtis* are organized at the Nyaya Panchayat level wherein all line departments participate and popularize/disseminate information about various issues related to agriculture, horticulture, animal husbandry, fisheries etc. Agriculture and allied departments do not have adequate personnel to regularly implement and monitor their programmes at the ground level – block and GP level. Adding to this, too many schemes and programmes of the Central and State Government causes confusion and additional pressure at the implementation level thus affecting quality.

3.3.8 Findings of Focused Group discussion in district Kanpur Dehat

The meeting held on 11-09-2012 was attended by 14 Senior officials of different departments including Agriculture, DRDA, PWD, Horticulture, Panchayat, Zila Parishad, Irrigation, Animal Husbandry, Health and Rural Development and the Chief Development Officer. The discussion yielded the following information about condition in the district:

- | | | | |
|--------------|-------------------------|---|--------------|
| Agriculture: | Net Sown Area | : | 2.91 Lakh Ha |
| | Net Sown Area in Rabi | : | 1.83 Lakh Ha |
| | Net Sown Area in Kharif | : | 1.06 Lakh Ha |
| | Net Sown Area in Zaid | : | 0.03 Lakh Ha |
 - | | | | |
|-----------------|-------|---|---------------|
| Productivity of | Wheat | : | 34.59 Qtl./Ha |
| | Rice | : | 23.21 Qtl./Ha |
- Due to very high increase in price of DAP farmers were now using more urea.
 - Earlier, Paddy was main crop in the district but due to non availability of canal water in Tail minors, it has become insignificant.
 - Due to serious decline in paddy crop, 12 rice mills in Pukhraiyan and Rasoolabad have closed.
 - Rasoolabad Tehsil has large part of usar land.
 - Serious Power crisis result in Tubewells not working to their capacity.
 - In case canal water is supplied adequately and timely, it is expected that sown area productivity for wheat & rice may increase by about 15% and 10% respectively.

- Due to shortage of canal water many farmers were shifting to pulses- Arhar, Moong and urad.
- Many farmers were also shifting to Ash Gourd (Petha) as it gives high return.
- Horticulture: Area under fruit (Guvava) trees was about 300 Ha and under spices such as chillies and Corriander about 50 Ha . There is no marketing problem for the produce.

Irrigation Rabi	Canal Length	CCA	PCA Kharif	PCA
ID Nabipur	336 Km.	53571 Ha	36%	41.5%
ID Dibyapur	122 Km.	20000 Ha	36%	41.5%
LGC	74.50 Km.			
Bhognipur Div	35.66 Km.			

- Public tubewells 255
Private Tubewells (*Including Pumpsets*) 45941
- Blocks with Deep Ground Water Level (60-95 ft) are Amordha, Malasa, Rajpur, Derapur and Sandalpur.
- Blocks with Medium Strata (20-60 ft) are Akbarpur, Jhinhak, Rasulabad, Maitha and Sarban Khera.
- Canal Water supply was neither adequate nor timely.
- In at least 10% of tail end minors water was not reaching.
- Desilting of canal was done every year during November-December.
- Large Number of incidences of Canal cutting/Blocking are reported. Last year 30 cases were filed and in 8 cases FIR were lodged with the police in Nabipur Khand. Tawan (penalty) amounting to Rs. 275000/- was recovered in 32 cases.
- Condition of outlets was reportedly poor/damaged.
- Roaster system exist but actually supply depend on availability of water in canal.
- WUAs does not exist, voters list under preparation.
- 100% water charges are collected through Tehsil.
- In 2011 Kisan Credit Cards to 31000 farmers were distributed.
- Employment & Migration: Farmers were facing problem in getting labour for agriculture work, wages for agricultural labour have increased due to migration of workers to Gujrat and Delhi and employment under MNREGA.
- Works undertaken under MNREGA include: laying Kharanja, Forestation, Canal maintenance, Link roads, Land development and Farm land levelling etc.
- Payment under MNREGA is done through Gram Sabha and there is generally delay in payment to labour.
- Health: Source of drinking water is generally local and India Mark-II handpumps. Handpumps of 30-40 feet deep boring have generally polluted water.
- Drainage and sanitary conditions in villages are generally poor.
- The district has 12 CHCs, 31 PHCs and the district hospital. Maternal and Child Welfare Centres also exist at these places.

- Significant disease among people include: Floursis (particularly in Block Rajpur and Amraudha) Iodine deficiency, Anaemia and Worm related. About 8-10 cases per month are found HIV positive.
- There is no TB Clinic but 19 TB centres and 4 TB units were working.
- All public schools have India Mark-II handpumps and toilets.
- Health Check-up of students is conducted annually in all public schools and Iron and de-worming tablets are distributed.
- Forest and Wetlands/Ponds: There is no reserved forest. Plantation at Roadside and Gram Sabha land under social forestry has been done.
- The district has about 1800 ponds but fish production was insignificant.
- Animal Husbandry: There were 24 Veterinary Hospitals and 70 AI Centres.
- Quality of Milch Cattle is average graded.
- There is no shortage of fodder for animals.
- Common disease in livestock is Worm infestation.
- The number of educational institutions for girls at different level were few as against for boys, e.g. Out 127 High Schools only 6 are for girls; Out of 126 Intermediate colleges 13 are for girls and Out of 52 Degree colleges only 2 for girls.
- As per BPL Census 2002, about 63% of Rural household were living below poverty line.
- There were no WUAs in the district.

3.3.9 Focussed Group discussion in district Farrukhabad

Irrigation: The canal network is around 140 km which is highly insufficient compared to the demand. Canal and *Kulaba* breaching is also a phenomenon in places where water is available. The water hardly reaches the tail end and hence there is every need to increase the amount of water supply for irrigation along with improving the infrastructure. Since there is very little water, there is hardly any instance of water logging in the district. Most of the irrigation needs are catered to by the private tubewells/bore wells. The excess of paddy cultivation in the district is also a reason for higher demand of irrigation water which is resulting in overdraw of groundwater in the absence of an elaborate canal system. Construction of cattle ghats to prevent damages, lining of canals and remodeling are of utmost importance in the district. The incidence of flood is only when water from upstream is released from dams and barrages. It is not due to rains as is the common perception as the amount of rainfall has decreased in the district. The flood water can be diverted through canals which are not currently happening and hence the drainage system needs to be rejuvenated. There have been no measures taken by the district to check siltation. Neither have there been any structures installed in this regard.

The irrigation department has been involved in orienting / educating farmers 1-2 times on irrigation systems, water use and management using CDs and DVDs. However there have been no such efforts off late by the department.

‘*Sinchai Mitra*’ – Friends of Irrigation is an initiative by the district administration wherein monthly meetings are held with the irrigation, agriculture and other allied departments and is chaired by the Chairman of the Zila Panchayat. Such meetings which

used to yield good results and most importantly ensure inter-departmental coordination are no longer a feature since quite some time.

The *Jiledars* of the Irrigation department holds monthly meetings with farmers on the 25th of every month to sort out irrigation related issues.

There is hardly any information / knowledge about the canal roster system amongst villagers. They are not aware as to when do the canal run and the right time to irrigate their fields. Hence, there is an increased dependence on tubewells. The department should broadcast the roster schedule regularly through local television and newspaper so as to inform the farmers about the availability of water. Average power availability is around 8 hrs in rural areas.

Jal Nigam: The department is currently setting up a system of water supply in the district following which sewage treatment will be taken up. The amount of water required for sewage is 135 LPCD. The average water table in the district is at 8 – 10 metres except in two blocks which are in the grey zone and the water table has fallen to 30 metres. There are a total of 26 piped water supply systems across the district which is majorly catering to the rural areas. Rest of the areas not covered under piped water supply is catered by tubewells. As regards water quality, only one block has excess of iron content. Water quality testing facility is available in the district.

Agriculture: Potato, maize and groundnut are major crops grown in the district. Sunflower used to be a major crop but is no longer grown due to water scarcity and lack of marketing facilities. Sprinkler systems were distributed to the farmers but they remove the sprinkler and use the pipes to flood the fields. There is a district level helpline that operates and provides farmers with the required assistance / information. However it is seldom used as there is not much awareness about the same amongst farmers. There is no knowledge amongst the dealers of seeds, fertilizers and pesticides on the right kind of seeds and fertilizer use. This results in farmers getting misdirected and compelled to use whatever is being sold by the dealers. Proper education of dealers is a must along with those of the farmers so that the right kind of inputs can be used.

Women are sent for training conducted by KVKs and the agriculture department on certain issues but there are hardly any programme / scheme to promote women's role in agriculture. Since potato is grown in large numbers their storage in cold chains becomes an issue due to limited capacity and hence farmers do not get proper price for their produce despite of ending up paying high rents for using the cold storage. This calls for semi-processing and processing units for potato and proper marketing facilities which will fetch them better incomes for e.g.: chips manufacturing unit in the district.

Cash crops like sugarcane can be grown where the canal system is catering but there is dependence on tubewells for growing vegetables. An NGO a few years back initiated *Aloe vera* cultivation amongst the farmers and provided them inputs. However they failed to guarantee buy back and hence the venture flopped.

Forest: There is only 1000 ha of forest land in the district. Canal side plantation has not been initiated in a big way due to lack of plantation patches. Sesame has been grown at some places and was successful but is now fast dying owing to fungus infection. There are only temporary wetlands in the district.

Health: No such incidence of water borne diseases in the district except sporadic ones which are controlled through timely interventions. Vector borne diseases which are currently low can increase owing to expansion in irrigation if problems like water logging are not handled simultaneously.

Institutional delivery is low in the district despite of schemes and efforts due to low levels of literacy and traditional beliefs.

Animal Husbandry: An extensive canal system would have led to more fodder availability thus leading to better livestock rearing and improved livelihoods. However, the current situation is not very encouraging although people do maintain cattle other than agriculture.

The milk production in the district is satisfactory but marketing facilities need to be improved. The department does conduct camps and contact programmes with the villagers educating them on proper upkeep / maintenance of the cattle but very infrequently due to lack of staff and logistics with the department. Activities like immunization etc. cannot be carried out at regular intervals due to the bottlenecks.

Para-vets are not very active in carrying out their responsibilities as they consider themselves to be veterinary doctors after getting trained. There is no mechanism to force them to do their duties.

Fisheries: There are no Private or Government hatcheries in the district. The situation currently is dull but there is a lot of scope for improvement in the district provided line departments co-operate, financial institutions extend their support and marketing facilities are created.

MGNREGS can be used for the construction of ponds and also support to plantation and bore well thus improving pisciculture. Small rivers / rivulets can be tamed for pisciculture. There is no deficiency of fodder for the cattle in the district due to year round availability of maize, sugarcane etc.

Common observations: The Net Sown Area has increased considerably which implies that the fields are covered with one or the other crop in most parts of the year. This has also necessitated more water for irrigation.

There is a need in developing and promoting IEC activities under agriculture and irrigation activities especially at the Nyaya and Block Panchayat level. The Village Water and Sanitation committees of the Gram Panchayat can be used to disseminate information regarding water use and efficiency, cropping patterns, irrigation systems etc.

Adequate and frequent hand holding of irrigation and agriculture department staff and personnel is of utmost importance for them to be abreast of developments in agriculture and allied issues across the district.

NGOs are required at the block level which would engage with the farming community on a regular basis and would orient them on issues related to cropping pattern, water use efficiency, conflict resolution, higher productivity with minimum inputs, preserving soils nutrients, developing other allied activities like horticulture, fisheries, animal husbandry etc.

There is a need for convergence amongst the forest and animal husbandry departments on castrating the male Nilgai to stop further reproduction. Fast multiplication of Nilgai and reduced grasslands causes damages to standing crops. Funds need to be provided by the Forest department to the Animal Husbandry department to carry out the operation.

Waste water need to be treated and used for irrigation instead of letting it out to the rivers or other water bodies. This will help avert health related problems as well as solve the issue of inadequate water availability for irrigation at least in certain regions.

3.3.10 Findings of Focussed Group discussion in district Auraiya

The meeting held on 12-09-2012 chaired by Mr. Lalmani, officiating District Magistrate was attended by 24 Senior Officials of different departments including Agriculture, Irrigation, Rural Engineering, Health, Jal Nigam, Social Welfare, Forest, Tubewell, DRDA, CDO and Rural Development. The discussion yielded the following information about the conditions in the district:

- Some Serious problems:
 - i) Serious problem of drainage, water logging and seepage in Block Achhalda and Bidhuna.
 - ii) Seepage in Etawah Branch canal leading to Sodicity, Salinity and sandy soil.
 - iii) Sodicity has affected the entire district.
 - iv) Rugged land in Block Auraiya and Ajitmal.
 - v) Wild animals damaging crops seriously in block Ajitmal.
- Agriculture:

Net Sown Area in Rabi -Wheat	:	100625 Ha
Net Sown Area in Kharif-Paddy	:	50179 Ha
Net Sown Area in Zaid-Moong	:	5000 Ha
- Productivity of

Wheat	:	37.51 Qtl./Ha
Paddy	:	26.24 Qtl./Ha
Moong	:	4.90 Qtl/Ha
- Crop Diversification: Crop area under Maize increased from 9075 Ha 5 years back to 16154 Ha at present.

- HYV seeds are used in all Kharif, Rabi and Zaid crops due to which income improved particularly in Paddy and Maize.
- Possibility of increase in sown area if canal water is supplied timely and adequately: Wheat by 5000 Ha, Paddy 4000 Ha, Maize 4000 Ha, Moong 3000 Ha and Sugarcane by 5000 Ha.
- Increase in productivity is possible if adequate and timely canal water is supplied: Wheat by 4 Qtl/Ha, Paddy 3 Qtl/Ha, Maize 5 Qtl/Ha and Sugarcane by 5.5 Qtl/Ha.
- Horticulture: Area under fruit trees 9870 Ha (Mango, Guvava) under spices 885 Ha (Garlic and Chillies).
- Market price of Garlic is between Rs. 800/- and Rs. 1200/- per quintal which is very low and, therefore need minimum support price.
- Irrigation: Canal Length : 818.798 Km
Public Tubewells : 308
Private Tubewells : 30000

(Including Pumpsets)

- Net irrigated to net sown area - 92%
- Source wise irrigation

Canal	:	37.15%
Public Tubewells	:	8.7%
Private Tubewells	:	53.03%
- Canal water in 4 Tail end minors with command area of about 400 Ha is not reaching.
- Problems preventing canal water from reaching tail end include: indisciplined farmers, illegal outlets and absence of Osrabandi.
- Desilting of Canal is done twice a year, during April-June and October-November.
- About 60 cases per year of canal cutting / blocking were recorded.
- For canal cutting/Blocking Tawan (penalty) of Rs. 3.5 Lakh was collected last year and 6 cases were filed under canal Act.
- Canal seepage has affected about 1490 Ha area.
- Condition of outlets not satisfactory as most of them are damaged.
- Roaster system for canal water was in operation.
- WUAs does not exist.
- Water charges are collected through Tehsil. Though collections were 100% but mostly delayed.
- Marketing of Produce: Farmers face problems as there is only one mandi in Auraiya proper which is incapable to meet demand of farmers. Thus, most of the produce is sold locally or through middlemen.
- Out of the proposed 38886 only 11771 Kisan Credit Cards were issued this year.
- Employment and Migration: There is no shortage of agriculture labour as there is no problem of migration. Labour is also available for MNREGA works.
- Health: Common water borne diseases include: acute diarrhoeal disease, Bacillary dysentery, Viral hepatitis A and C and Typhoid. Vector borne diseases include:

Malaria, Dengae, Chikanguniya and Filaria. High incidence of both type of diseases in Block Achhalda and Sahar.

- Sources of drinking water were local handpumps, well and India Mark-II handpumps.
- The district has 5 CHC, 26 PHC, 157 sub-Centre, 22 Ayurvedic and Unani hospitals and 7 Homeopathic hospitals.
- Animal Husbandry: There were 14 Veterinary hospitals, 25 AI Centres under Animal husbandry department and 16 under BAIF.
- The quality of milch cattle is medium graded.
- Average production of milk the district is 250000 litres/day which is sold locally. There is no milk processing industry.
- Only about 20% of the required fodder was available.
- Common diseases related to livestock were Parasite infection, Tick Born disease, Sporadic Bocterial and urinary infection.
- Forest and Wetlands: Area under forest in the district was 100.1 Km (10000 Ha).
- Area under wetlands is 1200 Ha. Its area is reducing due to encroachment by people.
- Self Help Groups: A total of 5208 SHGs were formed till August 2012. Out of them 250 were inactive. The number of women SHGs was 1533. A total of 2014 SHGs including 42 women SHGs were engaged in income generating activities.
- Block Ajitmal and Auraiya have deep ground water strata of over 50 feet where more public Tubewells were needed.
- About 45% of rural families were living below poverty line as per BPL census 2002.

3.3.11 Findings of Focussed Group discussion in district Etawah

Irrigation: Adequate availability of water for irrigation in canals can be of benefit to activities of other departments like drinking water and sanitation etc. Canal water is available at very cheaper rates as against water from tubewells / bore wells. However, canal water has reduced and there is no provisions for distribute water equitably. Further there is lot of wastage especially in Kharif crops. If the water is conserved and wastage can be controlled, more area can be brought under irrigation. The department has not conducted any training or orientation for farmers on effective water use as per crops. There is a need for construction of minors and ‘gullies’ to convey the water to the fields which is not happening today.

The reason behind breaching of canals are man-made, animal and nature created. Most of the time it is man-made. The irrigation structures have become very old and calls for maintenance and modernization with new equipments. Participatory irrigation will be best understood with the formation of WUAs as per the PIM Act will be constituted soon. The restructuring project will be sustainable only when modernization/automation will happen in the case of construction of new canal systems, maintenance and rehabilitation and in arresting breaches of the canal structure.

The *Sinchai Bandhu* initiative is running well in the district.

Minor irrigation: Nearly 56% of irrigation in the district is with the help of groundwater.

Shallow, medium and deep tubewells have been installed for the purpose. However, shallow tubewells have failed and farmers prefer medium and deep tube well. Aquifer mapping should be done to determine the depth of boring and inform villagers on the exact state of groundwater in the region so as to help them in deciding the use.

Agriculture: Training/workshops/*goshtis* at block and Nyaya Panchayat level are conducted. The Krishi Vigyan Kendra (KVKs) disseminates information on better and improved varieties and also on crop specific water requirement. Sprinkler sets and pipes have been distributed around 5-7 years back. However farmers in canal served areas hardly use sprinkler sets for irrigation. There have been three times more productivity due to the use of sprinkler sets and even more productivity because of drip irrigation sets. However the successful use of the sprinkler and drip sets has been possible only in two blocks. Excessive water logging has given rise to wastelands and ravines. Salt tolerant species need to be introduced in the wastelands.

Audio-visual means like documentary films have worked well in disseminating information to the farmers on agriculture and allied areas. There have been exposure visits for farmers to expose them to good practices in agriculture and pisciculture. Disseminating information with the help of sms has also been very popular off late because of the availability of mobile with most farmers.

Fisheries: Farm ponds are filled by canals in the month of May and June. However, water availability should be increased to make pisciculture more viable in the district. There was an effort by the department to distribute the land leases to women but none of them had land registered in their name. Marketing facilities should be created to boost production and contribute towards sustainability of the venture. There are no hatcheries in the district except a fish farm for seed production. As of now only 100-150 families in the district are engaged in pisciculture. Huge lack of staff is affecting the performance of the department.

Horticulture: Potato and garlic are grown as major crops. Very few horticultural crops can be grown along the canal side due to water-logging. Some programmes/schemes for training women in fruit preservation can be started as a skill and value addition initiative in the district.

Forests: Excessive seepage from canals is hindering the process of plantation. The sides of canals should be clearly demarcated on both sides so that the land is not encroached by farmers and plantation can be taken up on a large scale. There are over 17000 ha of forests in the district out of which around 420 ha is along the canal system and 13000 ha of land is ravenous in the district.

Soil and Water Conservation: Drainage development has helped in reclamation of land wherein the fallow cover has reduced from 25000 ha to 20000 ha.

Jal Nigam: The source of drinking water across the district is mainly ground water. However, surface source development will reduce cost and will check indiscriminate use

of ground water. Hand pumps are not a permanent source of water supply. However, the current situation indicates that not only human but even cattle has to depend on hand pump for its drinking water requirement. Maintenance of hand pumps have been entrusted to the Gram Sabhas. 90% - 95% diseases are related to bad water supply. In the urban area, there is no such activity related to drainage. Hand pumps have been installed in around 620 schools across the district.

Health: During the water logging season incidence of malaria increases whereas there are more cases of diarrhea at the time when the water recedes.

Common observations: Water logging is not due to seepage but because of poor drainage systems which does not allow the rain water to flow. Very little participation of women in agricultural activities in the district has been observed due to social restrictions. Even in MRNREGS, there is only 7% participation of women in the workforce. Cattle is another source of damage to the canal banks as they break the sidewalls during their movement to and fro from canal. Despite construction of cattle ghats, Inter-departmental coordination is a common phenomenon in the district.

3.3.12 Findings of Focussed Group discussion in district Mainpuri

Irrigation: The entire irrigation infrastructure in the district is around 125 years old and have crossed their life span. There have been no restructuring or remodeling of the existing structures. Farmers do not allow the passage of water through their fields to other fields. All this results in huge wastages. All blocks in the district are covered under canal irrigation. Canal breaching is a serious issue like in other districts. The irrigation department has not conducted any trainings or orientation for the farming community on efficient water use. Despite of a good canal system, use of bore wells still remains rampant across the district. There are two blocks out of nine which falls in the dark zone indicating overexploitation of groundwater. There is ample of waterlogged sites in the district which calls for a comprehensive drainage system. There is acute shortage of staff in the department – almost 50% positions are vacant. The department officials especially those at the field level need to be trained on how to deal with erring farmers and how to cope with issues like political patronage thus making disciplinary action almost impossible.

Horticulture: There is heavy soil erosion by the canal side which further reduces the canal life. Plantation of fruit bearing trees will lead to checking soil erosion and increased revenue. Farmers were distributed pipes for flood irrigation on their fields. The canal tube well ratio in the district is approx. 75:25. The major fruits grown are guava, bell, atonal etc.

Agriculture: Poor drainage causing excessive water logging has resulted in wasteland formation and hence reclamation has not worked due to successive water logging every year. This calls for an elaborate drainage system only after which the wasteland can be reclaimed. The ATMA scheme for agriculture extension has been implemented in the district as per guidelines. Convincing farmers and marketing have been very difficult

which is why innovative agriculture is not possible many a times. Availability of bio-inputs is not always certified following which it cannot be trusted by farmers. Similarly, convincing farmers to use organic manure for agriculture has also not worked well despite demonstration as they all want faster returns.

Ground Water and Hydrology: Farmers opt for boring despite ban by the Government on Private and Government bore wells.

Fisheries: Farm ponds should be promoted by the Government keeping in view the low level of pisciculture in the district. The department is very poorly staffed with just one official at the district level and having no facilities to reach out to the community. Most of waterlogged areas are on private land and hence the Gram Sabah cannot decide the channeling of the water into ponds. The department extends the benefits of the scheme to families living under BPL, small and marginal farmers, landless etc.

Animal Husbandry: Fodder is imported in summer. The major issues affecting cattle rearing are parasitic infections in waterlogged areas and lack of clean drinking water.

Forest: There is around 1400 ha of reserved forest land in the district. Farmers encroach upon the land immediate to the canal sides thus making it difficult for plantations. Fencing of plantations are a must in order to ensure its life and protect it from animals. At least 10 – 30 metres of the bank on either side should be developed to enable plantation by the department. *Vilaiti Babool* is grown in places on places with pH more than 9. Other plants that are grown along with canal banks as of now is – sesame, *jamun*, *arjun* etc.

Pollution Control Board: It monitors the quality of river water both at the upstream and downstream. There is only one water polluting industry in the district. Any renovation of canal works should avoid polluting industries. Construction of ponds will definitely help in raising the water table.

Common observations: It was suggested that the irrigation department should extend its full support to Fisheries for its promotion in the district. Fisheries department should immediately prepare IEC materials detailing the schemes of the department and should be widely circulated at the district, block and gram panchayat level. Also care needs to be taken to avoid disturbing the migratory bird (mostly *saras*) nesting areas which are usually around the wetlands.

Community interaction with farmers at Village Koson

Irrigation and Agriculture: Excess of water is a disadvantage as it does not get drained and some areas do not have gool for directing water to the fields. On the other hand, there are places which do not get water. 30% of the total land area remains inundated for a major part of the year thus rendering it useless for agriculture. It is not possible to grow crops in the entire field area as conveyance of water is a big issue. Minors should be connected which will enable a large area to be irrigated. Agriculture and cattle rearing are

interconnected. While women do not work in the open fields they take care of the fodder and other necessities of the cattle. Without the cattle being properly fed and taken care of, it is not possible for them to be used for agriculture. Hence, both men and women contribute in agriculture in their own ways. Villagers are not very confident of the WUA model and that it will resolve all issues related to irrigation. The major reasons being illiteracy and caste and class based division. Maintenance of irrigation structures cannot be taken up under MGNREGS as there is lack of labour due to lesser wages (120 as compared to 150 for on farm rates) and also irregularity in payment. Also there is a restriction on using of machines which further prevents work. Improvement in infrastructure will lead to better use.

Traditional agricultural practices has not led to increase in production. Whatever has increased is due to the use of modern inputs and machinery. However with increase in production cost of inputs have also increased many folds which is why the profit margin or net income of farmers have gone down substantially. This has resulted in farming being considered as an unproductive occupation and something to be pursued for a living in the absence of other options. Paddy is grown in the region since the last 30 years. Land reclamation has also increased pressure on the existing irrigation structures which has increased the use of tubewells. This has resulted in the groundwater table going down to 30 ft. Fisheries and sugarcane cultivation have a lot of potential but is not pursued because of lack of marketing facilities. Another reason for pisciculture not being popular is that the majority of the population is vegetarian. Hence the bulk of the produce will have to be sold which calls for storage and marketing facilities.

Education: Around 70% - 75% children in and around the village go to Government schools for primary and secondary education. Quality of higher education is not good in the near vicinity which is why either children continue with agriculture as their profession or migrate to nearby cities. The landless or small and marginal farmers do not just depend on agriculture for their income. Children from their families move to cities for employment and thus contributes to the family income. This is not so much in the case of big farmers. Around 20% of girls goes for higher education from the village.

Health: There is no health centre in the village and the nearest is around 7-8 kms from the village. A building has been constructed in the name of a sub-health centre but there have been no efforts to make it operational since the last 2-3 years. The villagers are not aware about any ANM or MPW who visits the village.

Around 90% of the village population is affected by malaria due to water logging. It was informed that there have hardly been any steps taken by the health or any department to control the menace. People do not remember when was the last disinfection / spraying done in the village.

Functioning of the Panchayat: There is no mechanism at the Panchayat level to check the status of education, health or nutrition as there are no Gram Sabha meetings or even monthly meetings of the Gram Panchayat with the line department officials. There is no sharing of information by the Gram Panchayat and the Pradhan is a woman from the SC

community. It was informed that the participation and support from the majority affluent 'thakur' class is almost negligible. This makes it more difficult for the Panchayat to function and hence this is taken as an excuse for non-performance. People are just aware about the standing committees on paper but do not remember who all the members are as the committees never met them since their formation.

Impact on local flora and fauna: There are not many cases of snake bites despite the area being waterlogged as the snake population has reduced drastically owing to high pesticide use in the fields.

3.4.1 Findings of Focussed Group discussion in district Rae Bareli

The meeting held on 03.09.2012 was attended by 20 senior officials of different departments including agriculture, Irrigation, Veterinary, Fisheries, Forest, Horticulture, Minor irrigation, Health, Pollution Control Board, Jal Nigam, Tubewell, C.D.O. and DRDA. The discussion yielded the following information about the conditions in the district:

Agriculture: About 90% of the farmers in the district are marginal and small. Marginal farmers do not get sufficient quantum of work in off-season. The farmers also face the erratic electricity supply. There is no roaster of electricity supply. Input cost of cultivation is increasing. The cost of seed, fertilizer, labour and implement use is increasing, making farming less remunerative. For example, the cost of DAP has tripled during the past 2 years. There is a change in cropping pattern. The area under Mentha is presently 15000 ha, which is likely to increase to 30000 Ha in 2013. Mentha is irrigated both by canal and TW. Some areas under rice – wheat cropping sequence are being replaced by rice-mustard-mentha (3 crop system). Net sown area in the district is 1.82 lac ha and Gross sown area is 3.22 lac ha. 1.51 lakh ha, in Rabi and 1.21 Lakh ha in Kharif and about 35,000 ha in Zaid. Productivity of rice is 22.5 q/ha (paddy 33.75 q/ha). Productivity of wheat is 28 q/ha. About 6% increase in sown area in Rabi in possible of canal water in supplied adequately and timely and in such condition, about 3-4% increase in yield in both Rabi and Kharif in expected. Marketing of grains is through procurement centres but all the produce is not purchased by procurement centres. Hence, farmers may have to sell their produce to local traders at cheaper rate than MSP. MSP is available only for paddy and wheat. Soil testing lab exists in the district. Rs. 7 per soil sample testing charge is for NPK and Rs. 30 for micronutrient analysis. Soil health card has been issued to farmers to help them get fertilizer. Bio fertilizers are also being used by the farmers.

Horticulture: Area under banana is 200 ha, which is being increased through government efforts in Horticulture Mission. Chillies in Sataon and Khairo block covers about 250-300 ha. Tomato covers about 200 ha. Among floriculture species, gladiolus and marigold are prominent and cover about 20 ha. Tulsi covers about 60-70 ha. Under National Horticulture Mission, citrus, mango and aonla are also being promoted. Tissue cultured banana are available to farmers. Problem of non-availability of processing facility exists in horticultural crops, especially in tomato and chillies. Marketing facility

is local as well as in Kanpur for the farmers engaged in horticultural crops. There is no price regulation and the farmers have to sell their produce at a very cheap rate, eg. Chillies are purchased @ Rs. 3-4 per kg at the farmgate. Similar is the case with hybrid tomato. Processing units need to be established in the district so that the farmers can get a good price of tomato, chillies, etc. There are 14 cold storage facility in the district.

Irrigation: Canal length is 1500 km in the districts. TW Government.-273, Private (Electric)-7547, Private (Diesel) pump sets-53425, Medium TWs-2271. Problem in Dalmau Pump Canal command is that it is dependent on electricity (flow is not by gravity). Due to erratic electricity supply, areas in Lalganj, Sareni and Khiro blocks are affected due to low canal water availability. Canal cutting- approx. 100 cases per year are reported. Cases are filed under Canal Act. Total irrigated area-157,000 ha, of which 64000 ha from canal, 93000 ha from TW, and pumpsets. About 25000 ha area is rainfed. There are no ponds which are used for irrigation.

Ground water: Sareni block has been declared as critical in terms of ground water exploitation (pre-monsoon water level 74.03 m bgl, post-monsoon 79.96 m bgl). Khiro and Rahi blocks are in semi-critical category. Pre-monsoon water level 45.45 m bgl and post- 38.69m in Khiro block. In Rahi block, pre- and post- water levels are 13.52 and 23.49 m bgl. Remaining blocks are in safe category for GW.

Loans: Crop loans are available through Co-operatives to 100,000 members. About 120,000 farmers have KCC from commercial banks. (Total number of farmers-293,000). Moneylenders charge exorbitantly, @ 5% per month interest.

Labour rates: Urban area minimum rate is Rs. 200 / day, in rural area more than Rs. 125/day (MNREGA rate is 125/ day). MNREGA has reduced labour migration to some extent.

MNREGA: Deepening of ponds, land reclamation works like- levelling, bunding, construction of check dams and bundhis, fisheries activity, etc., are taken up under this programme.

Problems: Timely payment to labourers is not done. EFMS (Electronic Fund Management System) may improve this, if adopted. Labourer does not know his right to demand work, and he is not sure whether he will get work if he so demands. All those who desire to work, get work.

Health: There is a problem of Fluoride toxicity in the ground water used for drinking in the district. The district has been taken up under Fluoride control programme. Lalganj and Sareni blocks are affected more due to Fluoride problem. In the recently dug borewell in the proposed Railway Coach Factory premises, 2.5 ppm F_I was found. Under the UPWSRP, steps may be taken to provide drinking water supply from surface water (canal) in the Fluoride affected blocks.

Waterlogging: Along the main feeder, waterlogging is prevalent on both sides of the canal affecting 500 to 600 ha area.

Wetlands: There is no large wetlands in the district.

Ponds & Fisheries: There are 12,445 ponds in the district, covering 10,462 ha area. These ponds are of 0.1 to 30 ha area. About 7400 ponds are of 0.2 ha or more area. Total fish production is about 5500 t/ year. Productivity is 35 q/ha/yr. Both Indian major carps and other carps are taken. Marketing is no problem, and is done locally and to Lucknow.

Problems: Only 17% ponds are productive as the remaining ponds are left out due to non-leasing by Revenue Department Lease is given on 1250 ha area whereas 7400 ha area is economically viable. Ponds are leased to the community. Fisherman and SC/ST of the village get the lease.

Dairy: Milk production is 50,000 litres/day, both under Mother Dairy and Milk Co-operative. Processing units are available. The rate of milk in rural area is Rs. 20 /litre and is bought @ Rs. 24-28 /litre by the Co-operative sector.

Animal Husbandary: There are 30 veterinary Hospitals and 57 AI centres. Due to less number of LEOs, 45 AI centres are functional. 15 centres of BAIF support AI activities and are doing good work. Green fodder, like- Jowar and Berseem is available.

Natural Disaster: Floods and Drought are not a problem in the district.

Tribes: No tribal population in the district.

BPL families: As per 2002 census, 213,108 BPL families in the district ie. about 50% total rural families.

Social problems: Illiteracy, inequality and practice of purdah are the problems. Among women, literacy is less than 50%.

Industry: No cottage industry. Thermal power plant, Paper Mill, Cement factory and Telephone unit are the major industrial units. Recently, a Rail Coach Factory is being established.

SHG: out of 12197 SHGs 11453 SHGs are active in the district, of which 2821 are Women SHGs. Activities include micro-credit through revolving fund for mini dairy, piggery, poultry, cycle repair, tailoring, etc. 15 NGOs are involved in SHG activities. Rajiv Gandhi Women Empowerment Scheme is also working for women development.

Waste disposal: Traditional pits in the villages are used.

3.4.2 Findings of Focussed Group discussion in district Barabanki

The meeting held on 05.09.2012 was attended by 14 senior officials of deferent departments including Animal Husbandry, Fisheries, Health, Irrigation, DRDA, Education, Minor Irrigation, Jal Nigam, Forest and Agriculture. The discussion yielded the following information about the conditions in the District:

- | | | | |
|-----------------|------------------|--------|--------------|
| 1. Agriculture: | Net sown area in | Kharif | 1,96,253 Ha. |
| | | Rabi | 1,99,816 Ha. |
| | | Zaid | 1,23,943 Ha. |

- | | |
|---------------------------------|----------------|
| 2. Productivity of Major crops: | |
| Wheat | 32.52 Qtl/ Ha. |
| Barely | 22.39 Qtl/ Ha. |
| Gram | 10.90 Qtl/ Ha. |
| Maize | 30.00 Qtl/ Ha. |
| Rape seed/Mustard | 10.41 Qtl/ Ha. |
| Paddy | 27.35 Qtl/ Ha. |

3. Crop Diversification: Area of the following crops increased.

Crops	Area under Crops (Ha)	Replaced Crops
1. Rapeseeds	35,100	Wheat
2. Mentha	91,820	Urad/Moong
3. Banana	500	Paddy, Wheat
4. Tulsi	400	Paddy/ Arhar

It was estimated that productivity of crops may increase by 5 to 10 percent in case Canal water reaches tail end. Soil testing is conducted by the Agriculture department seven places in the district.

Horticulture: Area under potato is 13,850 ha, which is increasing. Tomato area is 3785 ha which is also increasing. Area under green peas, brinjal and cauliflower is reducing. Among floriculture species, gladiolus and gerbera are being introduced in Ramnagar area through National Horticulture Mission. Green chillies and garlic are prominent among spices. Due to the problem of water logging, ginger etc. are not taken. Among fruits, area under banana (609 ha) has increased. Tissue cultured banana are available to farmers, which are being supplied by Sheel Biotech, Gurgaon, M/s H. U. Gugle, Bangalore and TRRI, New Delhi and others. Mango covers 12170 ha; prominent varieties include Dusehri, Langra and Chausa. Guava orchard covers 184 ha Mentha covers a significant area (75850 ha). Problem of marketing of fruits and vegetables like banana, mango and tomato does not exist as there is a ready market at Lucknow. Subsidy on micro-irrigation facility is limited to 60% to marginal and small farmers and 50% to others, which does not seem to attract many farmers.

Irrigation: The canal length is 1100 km in the district. 75% of CCA is actually irrigated in kharif and 52 % in rabi. Due to head reach, silting in canals is more in this district. Desilting is done only once in a year, which is not sufficient.

21 out of 251 canal minors 21 are not able to supply water at the tail end. The problem is mainly in Sidhaur, Bani and Ramsanehighat blocks. Incidence of canal cutting is increasing. FIRs are registered against this.

- Canal operating efficiency was reportedly 72%.
- There is problem of seepage in Daryabad Branch canal and area affected at right bank was 11180 Ha and at left bank 8550 Ha.
- Condition of outlets was reportedly not satisfactory.
- There was no WUAs in the district.
- 100% revenue collection is done.

Minor Irrigation: The total number of shallow TWs are 103266, of which 2772 are electricity operated, 98,898 are diesel operated and 1596 are from other sources. Due to availability of ground water, shallow and medium deep private TWs are very common. Allocation of boring expenses to MI department. in the case of Shallow boring (less than 30 m bore depth) is Rs. 5000 to small farmers, Rs. 7000 to marginal farmers and Rs. 10,000 to SC/ST farmers. The additional cost, if any, has to be borne by the farmers. A subsidy on purchase of pump sets is provided @ Rs. 2800 to small, 3750 to marginal and 5650 to SC/ST farmers by the Government. For medium deep (30-60m deep) boring, farmers have to deposit Rs. 1500 as the cost of Resistivity survey. The Minor Irrigation Department bears 50% cost of boring, pump house, sump house and drain and the remaining 50% cost is to be borne by the farmer. In the year 2012-13, 6400 borings are proposed on small and marginal farmers land (General and OBC), and 2400 on SC/ ST farmers.

Ground water: There is no problem of declining ground water in the district.

Drinking water: Jal Nigam had taken up during 2006-07, 2007-08 and 2008-09, seven schemes for quality problem. There are 43,600 India Mark II HPs in the district. Almost all habitations are covered under drinking water supply. The remaining are being taken up now. Both GOI and State schemes are operational for drinking water supply. There is no requirement of drinking water supply from the canal in the district due to adequate GW available.

Labour rates: Urban area minimum rate is Rs. 200 / day, in rural area more than Rs. 125/ day (MNREGA rate is 125/ day). MNREGA has reduced labour migration to some extent.

MNREGA: Labour rate is Rs. 125 per day. There is no problem of labour availability. Women participation till last year was almost nil, now being increased upto 11%. Deepening of ponds, land reclamation works like- leveling, bunding, construction of

check dams and bundhis, flood control works, drain restoration, plantation of saplings desilting of canals, fisheries activity, etc., are taken up under this programme.

Problems: Timely payment to labourers is not done. E-muster roll has been started from this year. EFMS (Electronic Fund Management System) may improve the timely payment, which is planned to be initiated from Oct. 2012. Labourer does not know his right to demand work, and he is not sure whether he will get work if he so demands. All those who desire to work, may get work.

Health: Among vector-borne diseases, Filarial is reported in the district. 752 cases were reported last year. There is a problem of iron toxicity in the ground water used for drinking in Trivediganj, Haidargarh, Ramsanehighat and Ramnagar blocks. Last year, six schemes have been taken up to tackle the problem in the district.

Waterlogging: Along the main feeder, waterlogging is prevalent on both sides of the canal affecting about 2000 Ha area.

Forest and Wetlands: Area under forest is 5565 ha. These are riverine forests, in patches along Ghaghra and Gomti rivers banks. Canal and roadside plantations exist and new plantations are also being taken up under social forestry scheme. Due to the security problem, no plantation is being done now along rail way line. Commercial species are mainly Shisham and Khair. Among special trees, 'Parijat' in Ramnagar tehsil may be mentioned (there are only six Parijat trees in U.P.). Among large water bodies, Bhagaharjhil under gram samaj is now proposed to be developed by Forest department under MNREGA.

Ponds & Fisheries: There are 8961 ponds in the district, covering 6220 ha area. These ponds are mainly community - owned, 22 ponds are under private ownership, covering 14 ha area. In addition, there are 49 jhils, covering 415 ha area. Only 3 jhils are with Fisheries Department and are used for seed stock and production; remaining are under private ownership. Productivity of fish is 29.5 q /ha/yr. Both Indian major carps (Rohu, Katla and Mrigal) and other carps (silver, grass and common) are taken. Marketing is no problem, and is done locally and to Lucknow.

Problems: Use of TW water for fish ponds proves costly. Irrigation Department may provide canal water to fish ponds which will work out to be cheaper.

Dairy: Milk production is low. The average milk production as per survey by A.H. Department in 2008-09 for milch cow was 1.62 litres/day, and 2.55 litres /day for buffalo. Processing units are available. One unit of PCDF and one private dairy (Devasheesh) is available, apart from one collecting and chilling centre.

Animal Husbandry: There are 36 veterinary Hospitals and one Mobile unit. There are 102 A.I. centres. There is a scarcity of green fodder due to increase in Mentha, Banana and Tomato area. Berseem is grown but the supply is not sufficient. Harvesting of rice and wheat by combines has also affected the availability of dry fodder. Common cattle

health problem includes worm infestation and seasonal illness. Vaccination is done by the Department Trace element / micronutrient deficiency, and sterility are the problems.

Natural Disaster: Floods are a problem, occurring almost every year. A 54 km stretch along Ghaghra on the left bank and 24 km on the right bank are affected by floods. After the 2009 high floods, embankment on the entire 54 km length have been approved. SirouliGauspur ,Ramnagar, and part of RamsanehiGhattahsils are affected by floods.

Tribes: No tribal population in the district.

BPL families: As per 2002 survey is rural area were 3,14,363 i.e. 47%.

Social problems: Illiteracy, inequality and purdah are the problems. Among women, literacy is low.

Industry: No cottage industry. Reliance Fibre, Govind Farm Equipments, Biscuit factory at Safedabad, IPL Somaiyya Group at Dewa and sugar mill at Haidergarhare the major industrial units.

SHG: 10,185 SHGs exist in the district, out of which 1,008 are defunct. 1744 are Women SHGs. Activities include micro-credit through revolving fund for mini dairy, poultry, cycle, diesel engine and pump set repair, tailoring, fisheries, handlooms, vermi-compost, floriculture, tent house, mini rice mill, goatery, beauty parlour, chicken and zardosi work etc. Dairy is the largest among SHG activities. The average number of members in the group is 12-15, while the guideline is 10-20 members. It is estimated that every member is able to earn an average of Rs. 500 to Rs. 600 per month.

3.4.3 Focussed Groupn discussion in district-Amethi; Venue: Collectorate, Amethi

The meeting held on 04-09-2012 was attended by the CDO and senior officials of Agriculture, Irrigation and Animal Husbandry departments. Other Line department's officials could not attend as they were engaged in Tehsil Diwas. The discussion yielded the following information about the conditions in the district:

Agriculture:	Net Sown Area in Kharif	:	1.52 Lakh Ha
	Net Sown Area in Rabi	:	1.36 Lakh Ha
	Net Sown Area in Zaid	:	0.12 Lakh Ha
Productivity of	Wheat	:	24.0 Qtl./Ha
	Rice	:	22.7 Qtl./Ha
	Arhar	:	10.2 Qtl./Ha

No new crops are sown. In case Canal water is supplied adequately and timely increase in sown area may be marginal. Crop production may increase significantly i.e. upto about 10% if canal water is supplied adequately and timely. There is problem of salinity in Amethi Tenshil and about 5000 Ha area is affected. Procurement centres do not purchase

entire produce of farmers. They purchase upto their target only and the remaining produce is sold in local market at comparatively lower rates.

Irrigation:	Canal Length	:	1900 Km.
	Govt. Tubewells	:	410
	Private including Pumpsets	:	80500

About 70% of the net sown area was irrigated. Canal water was available timely and adequately. There was no problem of tail and uses of the canal remaining unserved. Incidences of canal cutting and blocking of water by upstream users were few. Desilting of canal was done once a year. The efficiency of canal operation is about 70%. The outlets are maintained in good condition. There is no seepage problem in canals. Roaster system for canal water was operational. WUAs have been formed. No specific role of women users has been envisaged. There is no willingness of the farmers to manage water sharing and maintain canal through WUAs. Only about 10-20% of WUAs were willing to manage and collect dues from farmers. There is no problem in collection of water charges, which were collected through Tahsils. Animal Husbandry: There were 33 Veterinary hospitals, and 44 AI Centres out of which only 10 were functioning. There were about 10-15% cross breed milch cattles. The production of Milk was about 80000 Litre per day, most of which is transported outside to mother dairy and PCDF. A proposal for 9 large dairies in the district has been processed and sent to Lead bank Development Manager (NABARD). There was no milk processing units in the district. Fodder is not a problem for animals. Common diseases related to livestock include: Worm infestation, particularly in low lying and water logged areas, pneumonia in cold weather and Trypanosomes in which case animal become blind, starts circling, suffer with high fever and uneasiness. If not treated timely, dies. Major Industrial units in the district include: Indo-gulf Fertilizers Co. Ltd., Bharat Heavy Electricals Ltd., SAIL Jagdishpur Unit and Quality Packagings.

Some of the water related issues identified in FGDs in LGC districts are given below

S. No.	District related to water	Water Related Issues
1.	Auraiya	➤ Sources of drinking water were local handpumps, well and India Mark-II handpumps.
2.	Etah:	➤ Groundwater is contaminated in many places in the district.
3.	Etawah	<ul style="list-style-type: none"> ➤ The source of drinking water across the district is chiefly ground water. However, surface source development will reduce cost, improve the cost and will check indiscriminate use of ground water. ➤ Hand pumps are not a permanent source of water supply. However the situation as of now is that not only human but even cattle have to depend on hand pump for its drinking water requirement. ➤ Maintenance of hand pumps have been entrusted to the Gram Sabhas. 90% - 95% diseases are related to bad water supply. Lack of maintenance in urban area leads to bad quality of water.
4.	Farrukhabad	<ul style="list-style-type: none"> ➤ Jal Nigam is currently setting up a system of water supply in the district following which sewage treatment will be taken up. The average water table in the district is at 8 – 10 metres except in two blocks which are in the grey zone and the water table has fallen to 30 metres. ➤ There are a total of 26 piped water supply systems across the district which is majorly catering to the rural areas. Rest of the areas not covered under piped water supply are serviced by tubewells. ➤ As regards water quality, excess of iron content has been reported in one block. Water quality testing facility is available in the district. ➤ The Village Water and Sanitation committees of the Gram Panchayat can be used to disseminate information regarding water use and efficiency, cropping patterns, irrigation systems etc.
5.	Fatehpur	➤ Source of drinking water is India Mark-II handpumps and tubewells.
6.	Firozabad	<ul style="list-style-type: none"> ➤ Piped water supply system covers most parts of the district. Excess fluoride in groundwater has been found in some blocks closer to Etah district. ➤ Over exploitation of water and excessive use of chemical fertilizer, are the major issues in the district.
7.	Kannauj district	<ul style="list-style-type: none"> ➤ Groundwater table in the canal fed areas are quite satisfactory whereas in the remaining parts of the district, its at an alarming level due to excessive overdrawing for irrigation. Kannauj and Jalalabad blocks are in the dark zone where the water table is alarmingly low. ➤ There is a water quality testing lab in the district operational since 2003-04. However Gram Panchayats (GPs) have also been provided with water testing kits and have been trained to use them to test the quality of water from time to time. Till date no GPs has sent a single sample of water to the department. ➤ There are around 13392 sources of India Mark II hand pumps and tubewells across the district. Most parts of the district

S. No.	District related to water	Water Related Issues
		<p>are catered to by the piped water supply scheme through deep tubewells.</p> <ul style="list-style-type: none"> ➤ The department had implemented a few water conservations schemes like construction of soak pits etc. but was not able to continue the same due to paucity of funds. Also the terrain across the district is plain which does not provide much scope of water harvesting / water conservation works like check dams etc. except farm ponds, irrigation channels etc. ➤ Convergence with MGNREGA is not possible for undertaking water conservation works as under the scheme, the material labour ratio is 60:40 whereas the norms of the department is 80:20.
8.	Kaushambi	<ul style="list-style-type: none"> ➤ For drinking water, local as well as India mark-II handpumps, Tubewells and wells are used.
9.	Kanpur Dehat	<ul style="list-style-type: none"> ➤ Source of drinking water is generally local and India Mark-II handpumps. Handpumps of 30-40 feet deep boring discharge polluted water. ➤ All public schools have India Mark-II handpumps and toilets.
10.	Kanpur Nagar	<ul style="list-style-type: none"> ➤ Source of drinking water in rural areas is mostly India Mark-II handpumps and in towns and city is piped water. ➤ Testing of drinking water quality is done at the time of boring for handpumps. ➤ Average ground water level in the district is about 20 m. Tehsil Bilhaur has 9 m while Tehsil Kanpur has 25 m deep water table.
11.	Kasganj	<ul style="list-style-type: none"> ➤ Kasganj lies in dark zone with respect to ground water zonation based on the ground water table. Drinking water supply is based on hand pumps and tube wells. In urban areas piped water supply is used to provide drinking water whereas in rural areas there are 26 piped water supply schemes and hand pumps (IM II) covering the entire district. This is to prevent water borne diseases. However, some habitations are not covered with water supply schemes and some hand pumps become dysfunctional every year. This indicates lack of services in potable water supply. Treated water is supplied through overhead tanks.
12.	Mainpuri	<ul style="list-style-type: none"> ➤ Farmers opt for boring despite ban by the Government on Private and Government bore wells. ➤ U.P. Pollution Control Board (UPPCB) monitors the quality of river water both at the upstream and downstream. There is only one water polluting industry in the district. Any renovation of canal works should avoid polluting industries. Construction of ponds will definitely help in raising the water table.

Source: FGD, IRGSSA

4.5.5 Performance of Surface Water Schemes

Performance of surface water schemes in LGC & Haidergarh has been described based on FGDs conducted in Project area. Some of the Issues which emerged during FGDs are given below.

LGC

S.No.	District	Canal System Related Issues
1.	Auraiya	<ul style="list-style-type: none"> ➤ Serious problem of drainage, water logging and seepage in blocks Achhalda and Bidhuna. ➤ Seepage in Etawah Branch canal leading to sodicity, salinity and sandy soil. ➤ Canal water in 4 number tail end minors with command area of about 400 Ha is not reaching. ➤ Problems preventing canal water from reaching tail end include: indisciplined farmers, illegal outlets and absence of osrabandi. ➤ Desilting of canal is done twice a year, during April-June and October-November. ➤ About 60 cases per year of canal cutting / blocking were recorded. ➤ For canal cutting/ Blocking Tawan (penalty) of Rs. 3.5 Lakh was collected last year and 6 cases were filed under Canal Act. ➤ Canal seepage has affected about 1490 Ha area. ➤ Condition of outlets was not satisfactory as most of them are damaged. ➤ Roaster system for canal water was in operation. ➤ WUAs does not exist. ➤ Water charges are collected through Tehsil. Though collections were 100% but mostly delayed.
2.	Etah:	<ul style="list-style-type: none"> ➤ Canal cutting is a grave issue affecting irrigation efficiency. ➤ The reason behind cutting of canals is the reduced width of the distributaries and minor canal. Growth of vegetation and deposition of earthen materials along the banks of the distributaries, minors and field channels (<i>gools</i>) lead to reduced width, thus resulting in reduced water availability. This prompts farmers to tamper with kulaba system by cutting the minor and increasing the width of gools to get water to the farms. Because of this, tail end farmer get reduced flow of water or no water at all. ➤ The cleaning and desilting of the distributaries, field channels or gool does not take place regularly – only once a year, a major reason for reduced water flow. Because of poor drainage and maintenance of gool, water from farm lands can't be drained properly. Maintenance of Gool is not in the jurisdiction of Irrigation Department. ➤ The discharge in canal network is higher than the original design and capacity of the canal. Nevertheless, the water demand and increased area under agriculture and cropping intensity, make the current canal network not being able to meet the demands. ➤ Funds available under MGNREGS should and can be used to clean and desilt the distributaries and field channels. The panchayat may take this responsibility after seeking permission from the Irrigation Department.
3.	Etawah	<ul style="list-style-type: none"> ➤ Adequate availability of water for irrigation in canals can benefit activities of other departments like drinking water and sanitation etc. Canal water is available at very cheaper rates as against water from tubewells / bore wells. ➤ However in reality canal water has reduced and there are no provisions to distribute water equitably. Further there is lot

S.No.	District	Canal System Related Issues
		<p>of wastage especially in Kharif crops. If the water is conserved and wastage can be controlled, more area can be brought under irrigation.</p> <ul style="list-style-type: none"> ➤ The department has not conducted any training or orientation for farmers on effective water use as per crops. There is a need for construction of minors and 'gules' to convey the water to the fields which is not happening currently. ➤ The reason behind breaching of canals are man-made, animal and nature created. Most of the time it is man-made. ➤ The irrigation structures have become very old and calls for maintenance and modernization with new equipments. ➤ Participatory irrigation will be best understood with the formation of WUAs as per the PIM Act and will be constituted soon. ➤ The restructuring project will be sustainable only when modernization / automation will happen in the case of construction of new canal systems, maintenance and rehabilitation and in arresting breaches of the canal structure. ➤ The <i>Sinchai Bandhu</i> initiative is running well in the district.
4.	Farrukhabad	<ul style="list-style-type: none"> ➤ Canal network is around 140 km which is highly insufficient compared to the demand. Canal and <i>Kulaba</i> breaching is also a phenomenon occurring in places where water is available. The water hardly reaches the tail end and hence there is every need to increase the amount of water supply for irrigation along with improving the infrastructure. ➤ Since there is very little water, there is hardly any instance of water logging in the district. Most of the irrigation needs are catered to by the private tubewells / bore wells. ➤ The excess of paddy cultivation in the district is also a reason for higher demand of irrigation water which is resulting in overdrawing of groundwater in the absence of an elaborate canal system. ➤ Construction of cattle ghats to prevent damages, lining of canals and remodeling are of utmost importance in the district. ➤ The incidence of flood is only when water from upstream is released from dams and barrages. It is not due to rains as is the common perception as the amount of rainfall has decreased in the district. The flood water can be diverted through canals which is not currently happening and hence the drainage system needs to be rejuvenated. ➤ Enforcement of regulations need to be done to ensure full water availability at the tail end. ➤ There have been no measures taken by the district to check siltation. Neither have there been any structures installed in this regard. ➤ The irrigation department has been involved in orienting / educating farmers 1-2 times on irrigation systems, water use and management using CDs and DVDs. However there have been no such efforts off late by the department. ➤ '<i>Sinchai Mitra</i>' – Friends of Irrigation is an initiative by the district administration wherein monthly meetings are held with the irrigation, agriculture and other allied departments and is chaired by the Chairman of the Zila Panchayat. Such meetings which used to yield good results and most importantly ensure inter-departmental coordination are no longer a feature since quite some time. ➤ The <i>Jiledars</i> of the Irrigation dept. holds monthly meetings with farmers on the 25th of every month to sort out irrigation

S.No.	District	Canal System Related Issues
		<p>related issues.</p> <ul style="list-style-type: none"> ➤ There is hardly any information / knowledge about the canal roster system amongst villagers. They are not aware as to when does the canal run and the right time to irrigate their fields. Hence the increased dependence on tubewells. The department should broadcast the roster schedule regularly through local television and newspaper so as to inform the farmers about the availability of water. Average power availability is around 8 hrs in rural areas.
5.	Fatehpur	<ul style="list-style-type: none"> ➤ Canal works on roster basis but timely water is sometime not available to farmers. ➤ Canal water does not reach tail end in Block Khaga. ➤ Desilting of canal is done once a year. ➤ Cases of canal cutting and Blocking are large, particularly during Kharif, but not reported. ➤ Canal operating efficiency in Rabi was reportedly 35% and in Kharif 30%. ➤ Outlets were mostly tampered.
6.	Firozabad	<ul style="list-style-type: none"> ➤ The Gram Panchayats can use MGNREGS funds to clean <i>gools</i> (a local term for conduits connecting the distributaries to the field) and minors.
7.	Kannauj district	<ul style="list-style-type: none"> ➤ Uncontrolled distribution of water is the major problem in the district despite availability at present. Issues like rampant breach of canal by farmers, installing illegal conduits etc. results in the water not reaching the tail end. Even if the water reaches, it starts flowing in the reverse direction. ➤ Almost 80% of irrigation across the district is through tubewells / bore wells. There is a lot of wastage of water. ➤ Reclamation of land has resulted in increase of net sown area which implies more demand for irrigation against the existing infrastructure. Every year there is an increase of 10% of reclaimed land and such land cannot be left idle which means irrigation has to be ensured round the year. Also an average of 3-4 crops a year is taken across the district which leads to more demand. All this implies expansion of the existing infrastructure / new systems to cater to the increasing demand.
8.	Kaushambi	<ul style="list-style-type: none"> ➤ Fatehpur canal which also serve some part of the district has 25 minors and in 19 of them water was not reaching at tail end. ➤ Desilting of canal is done before Rabi and Kharif (November and June) ➤ Cases of canal cutting/Blocking are common. Tawan (Fine) was charged from two groups of farmers and 6 cases under canal Act were filed for Blocking in the last one year. ➤ Canal operating efficiency was approximately 50%. ➤ There was no problem of seepage in canal. ➤ Condition of outlets was reported as satisfactory. ➤ Roaster system was in practice

S.No.	District	Canal System Related Issues
9.	Kanpur Dehat	<ul style="list-style-type: none"> ➤ Due to shortage of canal water, many farmers were shifting to pulses- Arhar, Moong and Urd. ➤ Canal Water supply was neither adequate nor timely. ➤ In at least 10% of tail end minors water was not reaching. ➤ Desilting of canal was done every year during November-December. ➤ Large Number of incidences of Canal cutting/ Blocking are reported. In 2010-11 30 cases were filed and in 8 cases FIR were lodged with the police in Nabipur Khand. Tawan (penalty) amounting to Rs. 275000/- was recovered in 32 cases. ➤ Condition of outlets was reportedly poor/damaged. ➤ Roaster system exist but actually supply depend on availability of water in canal. ➤ WUAs does not exist, voters list under preparation. ➤ 100% water charges are collected through Tehsil.
10.	Kanpur Nagar	<ul style="list-style-type: none"> ➤ Canal water available as per roaster. ➤ Desilting of Canal is done once in a year, before Rabi. ➤ Canal irrigation charges were Rs. 287/- per Ha. both in Rabi and Kharif. ➤ WUAs have not been formed in the district, list of farmers was being prepared for voters list. ➤ Incidences of Canal cutting/blocking were reportedly 50 in a year. For which Tawan (penalty) is recovered in some cases while in other, cases are filed through Deputy Revenue Officer. ➤ About 50% of outlets were reportedly damaged. ➤ 100% irrigation charges are collected through Tehsil Staff.
11.	Kasganj	<ul style="list-style-type: none"> ➤ The discharge in the canal system is higher than the designed capacity and hence calls for remodelling. ➤ Increased discharge and lack of wings in the canal has caused seepage, soil erosion and breaching of the canals. Gates in minor canals are lacking. ➤ There is an urgent need for lining of minors, desilting of drains and installation of silt traps. ➤ Drainage system needs to be improved and developed. Maintenance requires budgetary support which is not adequate and regular at this moment. ➤ The issue of cutting of canals is very rampant in the district and initiatives taken by the Irrigation Department to regulate it turn out to be futile. 'Seejpaals' who are the field level personnel of the department are often manhandled/threatened by the farmers in case they try to object canal cutting or report the matter for disciplinary action. Many a times, FIRs are also lodged against the offenders but very little happens as punitive measures. This has created a sense of disillusion and discontent among workers. There are reported instances of pilferage of transformers and oil as well.
12.	Mainpuri	<ul style="list-style-type: none"> ➤ The entire irrigation infrastructure in the district is around 125 years old and have crossed their life span. There have been no restructuring or remodeling of the existing structures. Farmers keep on circulating hot and cold water to and from the field. They also do not allow the passage of water through their fields to other fields. All this results in huge

S.No.	District	Canal System Related Issues
		<p>wastages.</p> <ul style="list-style-type: none"> ➤ All blocks in the district are covered under canal irrigation. Canal breaching is a serious issue like in other districts. The irrigation department has not conducted any training or orientation for the farming community on efficient water use. ➤ Despite a good canal system, use of bore wells still remains rampant across the district. There are two blocks out of nine which falls in the dark zone indicating overexploitation of groundwater. There are number of waterlogged sites in the district which calls for a comprehensive drainage system. ➤ There is acute shortage of staff in the department – almost 50% positions are vacant. The department officials especially those at the field level need to be trained on how to deal with erring farmers and how to cope with issues like political patronage thus making disciplinary action almost impossible. ➤ Excess of water is a disadvantage as it does not get drained and some areas do not have gools for directing water to the fields. On the other hand there are places which do not get water. 30% of the total land area remains inundated for a major part of the year thus rendering it useless for agriculture. ➤ It is not possible to grow crops in the entire field area as conveyance of water is a big issue. Minors should be connected which will enable a large area to be irrigated.

Source: FGD, IRGSSA

Summary of Issues LGC Command Area

Major Environment Issues	Cause	Major Findings in LGC Command Area	Major Findings in Districts from FGDs	Stakeholders Recommendations / suggestions as outcome of Proposed Project Interventions
Soil Erosion in the Catchment area, which leads to silt deposition in water bodies.	Illegal cutting of forest for firewood and other uses, incidence of flood during rainy season, Lack of Warwandi and usarwandi in the system, undulating farm fields, movement of cattle's in canals, slippage of banks, erosion of bed	Silting of LGC System	Desilting is undertaken under MNREGA, but only restricted to field drains	Desilting, drainage and restoration of canals
Decreasing Fertility of soil & increasing consumption of fertilizer	Imbalance and higher use of chemical fertilizers, At the head end of canal command area reported, reduction in Soil fertility due to sodicity/ water logging. Very low practices of soil testing	Increasing consumption of chemical fertilizers	Increasing use of Farm Yard Manure	Promote Increased use of Farm Yard Manure
Changes in land use particularly in catchment area e.g. decreasing forest cover & diversion of land for other uses (non agriculture)	Forest cover is going to reduce due to illegal cutting of forest for firewood and other uses in some district	Exists in command area	Occuring due to decreasing fertility level.	Project with arrest land diversification to some extent.
Extreme climatic conditions, rainfall deficiency	National phenomena due to climate change	Once in ten years	Once in ten years	Crop diversification to combat extreme conditions
Limited availability of Surface Water	Lower forest cover, insufficient natural surface water resources, topography of the local area, lack of knowledge regarding water conservation and selection of crops. Insufficient of funds for care & maintenance of surface water resources, insufficient manpower for water management and collection of water charges, Insufficient and untimely supply of canal water, Due to higher use at head & middle end and illegal cutting water does not reach tail end, lack of knowledge regarding water conservation and conjunctive use of water.	Water does not reach tail end due to seepage	6% increase in productivity with timely availability.	Canal water should be made available
Limited availability of	Overuse of ground water for irrigation,	69% to 70% Ground water	Increasing use of ground	Canal water should be

Major Environment Issues	Cause	Major Findings in LGC Command Area	Major Findings in Districts from FGDs	Stakeholders Recommendations / suggestions as outcome of Proposed Project Interventions
Ground Water	deficiency in rainfall, lower recharge due to topography and geological conditions of the region.	development	water	made available
Surface & Ground Water Quality	Surface water quality was good due to higher dilution capacity of river/canals and lower presence of water polluting industries. Drinking water quality was observed above permissible limit in some part of LGC due to lower strata and geological conditions of the region. It may also be due to unscientific practices such as improper management of sewage and solid waste.	Ground water quality is of concern	Fluoride and in certain blocks	Drinking water supply to be providing from Canal
Increasing dependence on ground water for irrigation in comparison to surface water.	Untimely and insufficient availability of canal water, Water not reach at tail end, Lack of awareness regarding conjunctive use of water, water conservation & integrated water resource management.	Limited availability of canal water	Increasing dependence on ground water	Reduced dependence on ground water
Decrease in forest cover, vulnerability of Flora & Fauna	Wild animals eat the newly grown plant, Rainfall deficiency and high temperature also affect on newly grown plant. Illegal cutting of forest for firewood for cooking and other uses.	Land use change indicate very less forest cover	Nilgai menace has been report	None of the recommendations given by the stakeholders.
Sodicity / Salinity	High ground water level at the head of canal	Land use indicates barren unculturable land	Exists in Mainpuri & other districts at the head	Reduced salinity / sodicity
Water logging	Due to seepage, illegal cutting or damage of minor/canal	Major water logging problem was observed at the head end of canal command area	Exists in Mainpuri & other districts at the head	Drainage should be improved

Summary of Issues (Haidergarh Branch Area)

Major Environment Issues	Cause	Major Findings in 23 down Haidergarh Command Area	Major Findings in 3 Disticts	Stakeholders Recommendations / suggestions as outcome of Proposed Project Interventions
Soil Erosion in the Catchment area, which leads to silt deposition in water bodies.	Illegal cutting of forest for firewood and other uses, incidence of flood during rainy season, Lack of Warwandi and usarwandi in the system, undulating farm fields, movement of cattle's in canals, slippage of banks, erosion of bed.	Silting of Haidergarh System	Desilting is undertaken under MNREGA, but only restricted to field drains.	Desilting & drainage restoration of canals
Decreasing Fertility of soil & increasing consumption of fertilizer (Refer table 4.4 & 4.5).	Imbalance and higher use of chemical fertilizers, At the head end of canal command area reported reduction in Soil fertility due to sodicity/ water logging. Very low practices of soil testing.	Increasing consumption of chemical fertilizers	Increasing use of Farm Yard Manure	Increased use of Farm Yard Manure
Changes in land use particularly in catchment area e.g. decreasing forest cover & diversion of land for other uses (non agriculture)	Forest cover is going to reduce due to illegal cutting of forest for firewood and other uses	Exists in command area	Occuring due to decreasing fertility level.	Project with arrest land diversification to some extent.
Extreme climatic conditions, rainfall deficiency & drought	Natural phenomena due to climae change.	Once in ten years	Once in ten years	Crop diversification to combat extreme conditions
Limited availability of Surface Water	Lower forest cover, insufficient natural surface water resources, topography of the local area, lack of knowledge regarding water conservation and selection of crops. Insufficient of funds for care & maintenance of surface water resources, insufficient manpower for water management and collection of water charges, Insufficient and untimely supply of canal water, Due to higher use at head & middle end and illegal cutting water does not reach tail end, lack of knowledge regarding water conservation and conjunctive use of water.	Water does not reach tail end due to seepage	6% increase in productivity with timely availability.	Canal water should be made available
Limited availability of Ground Water	Overuse of ground water for irrigation, deficiency in rainfall, lower recharge due to topography and geological conditions of the region.	69% to 70% Ground water development	Increasing use of ground water	Canal water should be made available
Surface & Ground Water Quality	Surface water quality was good due to higher dilution capacity of river/canals and lower presence of water polluting industries.	Ground water quality is of concern	Fluoride and in certain blocks	Drinking water supply to be providing from Canal

Major Environment Issues	Cause	Major Findings in 23 down Haidergarh Command Area	Major Findings in 3 Disticts	Stakeholders Recommendations / suggestions as outcome of Proposed Project Interventions
	Drinking water quality was observed above permissible limit in some part of Haidergarh due to lower strata and geological conditions of the region. It may also be due to unscientific practices such as improper management of sewage and solid waste.			
Increasing dependence on ground water for irrigation in comparison to surface water.	Untimely and insufficient availability of canal water, Water not reach at tail end, Lack of awareness regarding conjunctive use of water, water conservation & integrated water resource management.	Limited availability of canal water	Increasing dependence on ground water	Reduced dependence on ground water
Decrease in forest cover, vulnerability of Flora & Fauna	Wild animals eat the newly grown plant, Rainfall deficiency and high temperature also affect on newly grown plant. Illegal cutting of forest for firewood for cooking and other uses.	Land use data indicate very less forest cover is very less	Shrinking habitat leading to Nilgai menace	Canal side plantation should be implemented.
Sodicity / Salinity	High Ground water level at the head of canal.	Land use indicates barren unculturable land	Exists in Dona Minor, Raebareli & other districts at the head	Reduced salinity / sodicity
Water logging	Due to seepage, illegal cutting or damage of minor/canal	Water losses from canals indicate water logging	Exists in all districts at the head of canal	Improved drainage

Annexure 6.2 A: A summary of
various Govt. Policies and Orders

**THE LAND ACQUISITION
ACT, 1894**

(1 OF 1894)

(As modified up to the 1st September, 1985)

Subordinate legislation – being published separately)

**GOVERNMENT OF INDIA
MINISTRY OF Law and Justice**

THE LAND ACQUISITION ACT, 1894

ARRANGEMENT OF SECTIONS

PART I

PRELIMINARY

SECTIONS:

1. Short title, extent and commencement.
2. (Repealed)
3. Definitions.

PART II

ACQUISITION

Preliminary investigation

4. Publication of preliminary notification and powers of officers there upon.

5. Payment for damage.

Objections

- 5A. Hearing of objections.

Declaration of intended acquisition

6. Declaration that land is required for a public purpose.
7. After declaration, Collector to take order for acquisition.
8. Land to be marked out, measured and planned.
9. Notice to persons interested.

and 10. Power to require and enforce the making of Statements as to names
interests.

Enquiry into measurements, value and claims, and award by the Collector.

11. Enquiry and award by Collector.

11A. Period within which an award shall be made.

12. Award of Collector when to be final.

13. Adjournment of enquiry.

13A. Correction of clerical errors, etc.

14. Power to summon and enforce attendance of witnesses and
production of documents.

15. Matters to be considered and neglected.

15A. Power to call for records, etc.

Taking possession

16. Power to take possession.

17. Special powers in cases of urgency.

PART III

Reference to court and procedure thereon.

SECTIONS.

18. Reference to Court.

19. Collector's statement to the Court.

20. Service of notice

21. Restriction on scope of proceedings.

22. Proceedings to be in open Court.
23. Matters to be considered in determining compensation.
24. Matters to be neglected in determining compensation.
25. Amount of compensation awarded by Court not to be lower than the
amount
awarded by the Collector.
26. Form of awards.
27. Costs.
28. Collector may be directed
- 28A. Re-determination of the amount of compensation on the basis of the
award of the Court.

PART IV

APPORTIONMENT OF COMPENSATION

29. Particulars of apportionment to be specified.
30. Dispute as to apportionment.

PART V

PAYMENT

31. Payment of compensation or deposit of same in Court.
32. Investment of money deposited in respect of lands belonging to
persons
incompetent to alienate.
33. Investment of money deposited in other cases.
34. Payment of interest.

PART VI

TEMPORARY OCCUPATION OF LAND

35. Temporary occupation of waste or arable land. Procedure when
difference as to compensation exists.

36. Power to enter and take possession, and compensation on restoration.

37. Difference as to condition of land.

PART VII

ACQUISITION OF LAND FOR COMPANIES

SECTIONS

38 (Repealed)

38A. Industrial concern to be deemed Company for certain purposes.

39. Previous consent of appropriate Government and execution of
agreement necessary.

40. Previous enquiry.

41. Agreement with appropriate Government.

42. Publication of agreement.

43. Sections 39 to 42 not to apply where Government bound by
agreement to provide land for Companies.

44. How agreement with Railway Company may be proved.

44A. Restriction on transfer etc.

44B. Land not to be acquired under this Part except for certain purpose
for private companies other than Government companies.

PART VIII
MISCELLANEOUS

- 45. Service of notices.
- 46. Penalty for obstructing acquisition of land.
- 47. Magistrate to enforce surrender.
- 48. Completion of acquisition not compulsory, but compensation to be awarded when not completed.
- 49. Acquisition of part of house or building.
- 50. Acquisition of land at cost of a local authority or Company.
- 51. Exemption from stamp-duty and fees.
- 51A. Acceptance of certified copy as evidence.
- 52. Notice in case of suits for anything done in pursuance of Act.
- 53. Code of Civil Procedure to apply to proceedings before Court.
- 54. Appeals in proceedings before Court.
- 55. Power to make rules.

THE LAND ACQUISITION ACT, 1894

Part 1:

Preliminary

1. Short title, extent and commencement-

- (1) This Act may be called the Land Acquisition Act, 1894.
- (2) It extends to the whole of India except (the state of Jammu and Kashmir).

(3) It shall come into force on the first day of March 1894.

2. [Repeal and Saving] Rep. Partly by the Repealing and Amending Act, 1914 (10 of 1914), s.3 and Sch. II, and partly by the Repealing act, 1938 (1 of 1938) s.2 and Sch.

3. Definitions. - In this Act, unless there is something repugnant in the subject or context, -

(a) the expression "land" includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth;

[(aa) the expression "local authority" includes a town planning authority (by whatever name called) set up under any law for the time being in force];

(b) the expression "person interested" includes all persons claiming an interest in compensation to be made on account of the acquisition of land under this Act; and a person shall be deemed to be interested in land if he is interested in an easement affecting the land;

(c) the expression "Collector" means the Collector of a district, and includes a Deputy Commissioner and any officer specially appointed by the [appropriate Government] to perform the functions of a Collector under this Act;

[(cc) the expression "corporation owned or controlled by the "State" means any body corporate established by or under a Central, Provincial or State Act, and includes a Government company as defined in section 617 of the Companies Act, 1956 (1 of 1956), a society registered under the Societies Regulation Act, 1860 (21 of 1860), or under any corresponding law for the time being in force in a State, being a society established or administered by Government and a co-operative society within the meaning of any law relating to co-operative societies for the time being in force in any State, being a co-operative society in which not less than fifty-one per centum of the paid-up share capital is held by the Central Government, or by any State Government or Governments or partly by the Central Government and partly by one or more State Governments].

(d) the expression "Court" means a principal Civil Court of original jurisdiction unless, the [appropriate Government] has appointed (as it is hereby empowered to do) a special judicial officer within any specified local limits to perform functions of the Court under this Act;

[(e) the expression "Company" means -

(i) a company as defined in section 3 of the Companies Act, 1956 (1 of 1956), other than a Government company referred to in clause (cc);

(ii) a society registered under the Societies Registration Act, 1860 (21 of 1860), or under any corresponding law for the time being in force in a State, other than a society referred to in clause (cc);

(iii) a co-operative society within the meaning of any law relating to co-operative societies for the time being in force in any State, other than a co-operative society referred to in clause (cc);]

[(ee) the expression "appropriate Government" means, in relating to acquisition of land for the purposes of the Union, the Central Government, and, in relation to acquisition of land for any other purposes, the State Government;]

[(f) the expression "public purpose" includes-

(i) the provision of village-sites, or the extension, planned development or improvement of existing village-sites;

(ii) the provision of land for town or rural planning;

(iii) the provision of land for planned development of land from public funds in pursuance of any scheme or policy of Government and subsequent disposal thereof in whole or in part by lease, assignment or outright sale with the object of securing further development as planned;

(iv) the provision of land for a corporation owned or controlled by the State;

(v) the provision of land for residential purposes to the poor or landless or to persons residing in areas affected by natural calamities, or to persons displaced or affected by reason of the implementation of any scheme undertaken by Government, any local authority or a corporation owned or controlled by the State;

(vi) the provision of land for carrying out any educational, housing, health or slum clearance scheme sponsored by Government or by any authority established by Government for carrying out any such scheme, or with the prior approval of the appropriate Government, by a local authority, or a society registered under the Societies Registration Act, 1860 (21 of 1860), or under any corresponding law for the time being in force in a state, or a co-operative society within the meaning of any law relating to co-operative societies for the time being in force in any State;

(vii) the provision of land for any other scheme of development sponsored by Government or with the prior approval of the appropriate Government, by a local authority;

(viii) the provision of any premises or building for locating a public office, but does not include acquisition of land for companies;]

(g) the following persons shall be deemed person "entitled to act" as and to the extent hereinafter provided (that is to say)-

trustees for other persons beneficially interested shall be deemed the person entitled to act with reference to any such case, and that to the same extent as the person beneficially interested could have acted if free from disability.

a married woman, in cases to which the English law is applicable, shall be deemed the persons, so entitled to act, and whether of full age or not, to the same extent as if she were unmarried and of full age; and

the guardians of minors and the committees or managers of lunatics or idiots shall be deemed respectively the persons so entitled to act, to the same extent as the minors, lunatics or idiots themselves, if free from disability, could have acted:

Provided that -

(i) no person shall be deemed "entitled to act" whose interest in the subject matter shall be shown to the satisfaction of the Collector or court to be adverse to the interest of the person interested for whom he would otherwise be entitled to act;

(ii) in every such case the person interested may appear by a next friend or, in default of his appearance by a next friend, the Collector or Court, as the case may be, shall appoint a guardian for the case to act on his behalf in the conduct thereof;

(iii) the provisions of [Order XXXII of the First Schedule to the Code of Civil Procedure, 1908 (5 of 1908) shall, mutatis mutandis, apply in the case of persons interested appearing before a Collector or Court by a next friend, or by a guardian for the case, in proceedings under this Act; and

(iv) no person "entitled to act" shall be competent to receive the compensation money payable to the person for whom he is entitled to act, unless he would have been competent to alienate the land and receive and give a good discharge for the purchase money on a voluntary sale.

PART II

Acquisition

Preliminary investigation

4. Publication of preliminary notification and power of officers thereupon. -

(1) Whenever it appears to the [appropriate Government] the land in any locality [is needed or] is likely to be needed for any public purpose [or for a company], a notification to that effect shall be published in the Official Gazette [and in two daily newspapers circulating in that locality of which at least one shall be in the regional language], and the Collector shall cause public notice of the substance of such notification to be given at convenient places in the said locality [(the last of the dates of such publication and the giving of such public notice, being hereinafter referred to as the date of the publication of the notification)].

(2) Thereupon it shall be lawful for any officer, either generally or specially authorized by such Government in this behalf, and for his servants and workman, -

to enter upon and survey and take levels of any land in such locality;

to dig or bore into the sub-soil;

to do all other acts necessary to ascertain whether the land is adapted for such purpose;

to set out the boundaries of the land proposed to be taken and the intended line of the work (if any) proposed to be made thereon;

to mark such levels, boundaries and line by placing marks and cutting trenches;

and, where otherwise the survey cannot be completed and the levels taken and the boundaries and line marked, to cut down and clear away any part of any standing crop, fence or jungle;

Provided that no person shall enter into any building or upon any enclosed court or garden

attached to a dwelling house (unless with the consent of the occupier thereof) without previously giving such occupier at least seven days' notice in writing of his intention to do so.

5. Payment for damage. - The officer so authorized shall at the time of such entry pay or tender payment for all necessary damaged to be done as aforesaid, and, in case of dispute as to the sufficiency of the amount so paid or tendered, he shall at once refer the dispute to the decision of the Collector or other chief revenue officer of the district, and such decision shall be final.

[Objections]

5A. Hearing of objections. - (1) Any person interested in any land which has been notified under section 4, sub-section (1), as being needed or likely to be needed for a public purpose or for a Company may, [within thirty days from the date of the publication of the notification], object to the acquisition of the land or of any land in the locality, as the case may be.

(2) Every objection under sub-section (1) shall be made to the Collector in writing, and the Collector shall give the objector an opportunity of being heard [in person or by any person authorized by him in this behalf] or by pleader and shall, after hearing all such objections and after making such further inquiry, if any, as he thinks necessary, [either make a report in respect of the land which has been notified under section 4, sub-section (1), or make different reports in respect of different parcels of such land, to the appropriate Government, containing his recommendations on the objections, together with the record of the proceedings held by him, for the decision of that Government]. The decision of the [appropriate Government] on the objections shall be final.

(3) For the purpose of this section, a person shall be deemed to be interested in land who would be entitled to claim an interest in compensation if the land were acquired under this Act.]

Declaration of intended acquisition

6. Declaration that land is required for a public purpose. - (1) Subject to the provision of Part VII of this Act, [appropriate Government] is satisfied, after considering the report, if any, made under section 5A, sub-section (2)], that any particular land is needed for a public purpose, or for a Company, a declaration shall be made to that effect under the signature of a Secretary to such Government or of some officer duly authorized to certify its orders [and different declarations may be made from time to time in respect of different parcels of any land covered by the same notification under section 4, sub-section (1) irrespective of whether one report or different reports has or have been made (wherever required) under section 5A, sub-section (2)];

[Provided that no declaration in respect of any particular land covered by a notification under section 4, sub-section (1)-

(i) published after the commencement of the Land Acquisition (Amendment and Validation) Ordinance, 1967 (1 of 1967), but before the commencement of the Land Acquisition (Amendment) Act, 1984 (68 of 1984), shall be made after the expiry of three years from the date of the publication of the notification; or

(ii) published after the commencement of the Land Acquisition (Amendment) Act, 1984 (68 of 1984), shall be made after the expiry of one year from the date of the publication of the notification:]

Provided further that] no such declaration shall be made unless the compensation to be awarded for such property is to be paid by a Company, or wholly or partly out of public revenues or some fund controlled or managed by a local authority.

[Explanation 1. - In computing any of the periods referred to in the first proviso, the period during which any action or proceeding to be taken in pursuance of the notification issued under section 4, sub-section (1), is stayed by an order of a Court shall be excluded.

Explanation 2. - Where the compensation to be awarded for such property is to be paid out of the funds of a corporation owned or controlled by the State, such compensation shall be deemed to be compensation paid out of public revenues.]

(2) [Every declaration] shall be published in the Official Gazette [and in two daily newspapers circulating in the locality in which the land is situated of which at least one shall be in the regional language, and the Collector shall cause public notice of the substance of such declaration to be given at convenient places in the said locality (the last of the dates of such publication and the giving of such public notice, being hereinafter referred to as the date of the publication of the declaration), and such declaration shall state] the district or other territorial division in which the land is situate, the purpose for which It is needed, its approximate area, and, where a plan shall have been made of the land, the place where such plan may be inspected.

(3) The said declaration shall be conclusive evidence that the land is needed for a public purpose or for a company, as the case may be; and, after making such declaration, the [appropriate Government] may acquire the land in manner hereinafter appearing.

7.*After declaration, Collector to take order for acquisition. - Whenever any land shall have been so declared to be needed for public purpose, or for a Company, the [appropriate Government], or some officer authorized by the [appropriate Government] in this behalf, shall direct the Collector to take order for the acquisition of the land.

8. Land to be marked out, measured and planned. - The Collector shall thereupon cause the land (unless it has been already marked out under section 4) to be marked out. He shall also cause it to be measured, and (if no plan has been made thereof), a plan to be made of the same.

9. Notice to persons interested. - (1) The Collector shall then cause public notice to be given at convenient places on or near the land to be taken, stating that the Government intends to take possession of the land, and that claims to compensations for all interests in such land may be made to him.

(2) Such notice shall state the particulars of the land so needed, and shall require all persons interested in the land to appear personally or by agent before the Collector at a time and place therein mentioned (such time not being earlier than fifteen days after the date of publication of the notice), and to state the nature of their respective interests in the land and the amount and particulars of their claims to compensation for such interests, and their objections (if any) to the measurements made under section 8. The Collector may in any case require such statement to be made in writing and signed by the party or his agent.

(3) The Collector shall also serve notice to the same effect on the occupier (if any) of such land and on all such persons known or believed to be interested therein, or to entitled to act for persons so interested, as reside or have agents authorized to receive service on their behalf, within the

revenue district in which the land is situate.

(4) In case any person so interested resides elsewhere, and has no such agent, the notice shall be sent to him by post in letter addressed to him at his last known residence, address or place or business and [registered under sections 28 and 29 of the Indian Post Office Act, 1898 (6 of 1898)].

10. Power to require and enforce the making of statements as to names and interests. -

(1) The Collector may also require any such person to make or deliver to him, at a time and place mentioned (such time not being earlier than fifteen days after the date of the requisition), a statement containing, so far as may be practicable, the name of every other person possessing any interest in the land or any part thereof as co-proprietor, sub-proprietor, mortgagee, tenant or otherwise, and of the nature of such interest, and of the rents and profits (if any), received or receivable on account thereof for three years next preceding the date of the statement.

(2) Every person required to make or deliver a statement under this section 9 shall be deemed to be legally bound to do so within the meaning of sections 175 and 176 of the Indian Penal Code (45 of 1860).

Enquiry into measurements, value and claims, and award by the Collector

11. Enquiry and award by Collector. - [(1)] On the day so fixed, or on any other day to which the enquiry has been adjourned, the Collector shall proceed to enquire into the objection (if any) which any person interested has stated pursuant to a notice given under section 9 to the measurements made under section 8, and into the value of the land [at the date of the publication of the notification under section 4, sub-section (1)], and into the respective interests of the persons claiming the compensation and shall make an award under his hand of-

(i) the true area of the land;

(ii) the compensation which in his opinion should be allowed for the land; and

(iii) the apportionment of the said compensation among all the persons known or believed to be interested in the land, or whom, or of whose claims, he has information, whether or not they have respectively appeared before him :

[Provided that no award shall be made by the Collector under this sub-section without the previous approval of the appropriate Government or of such officer as the appropriate Government may authorize in this behalf:

Provided further that it shall be competent for the appropriate Government to direct that the Collector may make such award without such approval in such class of cases as the appropriate Government may specify in this behalf.

[(2) Notwithstanding anything contained in sub-section (1), if at any stage of the proceedings, the Collector is satisfied that all the persons interested in the land who appeared before him have agreed in writing on the matters to be included in the award of the Collector in the form prescribed by rules made by the appropriate Government, he may, without making further enquiry, make an award according to the terms of such agreement.

(3) The determination of compensation for any land under sub-section (2) shall not in any way affect the determination of compensation in respect of other lands in the same locality or elsewhere in accordance with the other provisions of this Act.

(4) Notwithstanding anything contained in the Registration Act, 1908 (16 of 1908), no agreement made under sub-section (2) shall be liable to registration under that Act.]

[11A. Period shall be which an award within made. - The Collector shall make an award under section 11 within a period of two years from the date of the publication of the declaration and if no award is made within that period, the entire proceeding for the acquisition of the land shall lapse:

Provided that in a case where the said declaration has been published before the commencement of the Land Acquisition (Amendment) Act, 1984 (68 of 1984), the award shall be made within a period of two years from such commencement.

Explanation - In computing the period of two years referred to in this section, the period during which any action or proceeding to be taken in pursuance of the said declaration is stayed by an order of a Court shall be excluded.]

12. Award of Collector when to be final. - (1) Such award shall be filed in the Collector's office and shall, except as hereinafter provided, be final and conclusive evidence, as between the Collector and the persons interested, whether they have respectively appeared before the Collector or not, of the true area and value of the land, and the appointment of the compensation among the persons interested.

(2) The Collector shall give immediate notice of his award to such of the persons interested as are not present personally or by their representatives when the award is made.

13. Adjournment of enquiry. - The Collector may, for any cause he thinks fit, from time to time adjourn the enquiry to a day to be fixed by him.

[13A. Correction of clerical errors, etc. - (1) The Collector may, at any time but not later than six months from the date of the award, or where he has been required under section 18 to make a reference to the Court, before the making of such reference, by order, correct any clerical or arithmetical mistakes in the award or errors arising therein either on his own motion or on the application of any person interested or a local authority:

Provided that no correction, which is likely to affect prejudicially any person, shall be made unless such person has been given a reasonable opportunity of making a representation in the matter.

(2) The Collector shall give immediate notice of any correction made in the award to all the persons interested.

(3) Where any excess amount is proved to have been paid to any person as a result of the correction made under sub-section (1), the excess amount so paid shall be liable to be refunded and in the case of any default or refusal to pay, the same may be recovered as an arrear of land revenue.]

14. Power to summon and enforce attendance of witnesses and production of

documents. - For the purpose of enquiries under this Act the Collector shall have powers to summon and enforce the attendance of witnesses, including the parties interested of any of them, and to compel the production of documents by the same means, and (so far as may be) in the same manner as is provided in the case of a Civil Court under the 1[Code of Civil Procedure 1908 (5 of 1908)].

15. Matters to be considered and neglected. - In determining the amount of compensation, the collector shall be guided by the provisions contained in section 23 and 24.

[15A Power to call for records, etc. - The appropriate Government may at any time before the award is made by the Collector under section 11 call for any record of any proceedings (whether by way of inquiry or otherwise) for the purpose of satisfying itself as to the legality or propriety of any findings or order passed or as to the regularity of such proceedings and may pass such order or issue such direction in relation thereto as it may think fit:

Provided that the appropriate Government shall not pass or issue any order or direction prejudicial to any person without affording such person a reasonable opportunity of being heard.]

Taking Possession

16. Power to take possession. - When the Collector has made an award under section 11, he may take possession of the land, which shall thereupon [vest absolutely in the [Government]], free from all encumbrances.

17. Special powers in case of urgency. - (1) In cases of urgency whenever the [appropriate Government], so directs, the Collector, though no such award has been made, may, on the expiration of fifteen days from the publication of the notice mentioned in section 9, sub-section 1). [take possession of any land needed for a public purpose]. Such land shall thereupon [vest absolutely in the [Government]], free from all encumbrances.

(2) Whenever, owing to any sudden change in the channel of any navigable river or other unforeseen emergency, it becomes necessary for any Railway Administration to acquire the immediate possession of any land for the maintenance of their traffic or for the purpose of making thereon a river-side or ghat station, or of providing convenient connection with or accesses to any such station, [or the appropriate Government considers it necessary to acquire the immediate possession of any land for the purpose of maintaining any structure or system pertaining to irrigation, water supply, drainage, road communication or electricity,] the Collector may immediately after the publication of the notice mentioned in sub-section (1) and with the previous sanction of the [appropriate Government], enter upon and take possession of such land, which shall thereupon [vest absolutely in the [Government]] free from all encumbrances :

Provided that the Collector shall not take possession of any building or part of a building under this sub-section without giving to the occupier thereof at least forty-eight hours notice of his intention so to do, or such longer notice as may be reasonably sufficient to enable such occupier to remove his movable property from such building without unnecessary inconvenience.

(3) In every case under either of the preceding sub-sections the Collector shall at that time of taking possession offer to the persons interested compensation for the standing crops and trees (if any) on such land and from any other damage sustained by them caused by such sudden

dispossession and not excepted in section 24; and, in case such offer is not accepted, the value of such crops and trees and the amount of such other damage shall be allowed for in awarding compensation for the land under the provisions herein contained.

3(3A) Before taking possession of any land under sub-section (1) or sub-section (2), the Collector shall, without prejudice to the provisions of sub-section (3)-

(a) tender payment of eighty per centum of the compensation for such land as estimated by him to the person interested entitled thereto, and

(b) pay it to them, unless prevented by some one or more of the contingencies mentioned in section 31, sub-section (2),

and where the Collector is so prevented, the provisions of section 31, sub-section (2), (except the second proviso thereto), shall apply as they apply to the payment of compensation under that section.

(3B) The amount paid or deposited under section (3A), shall be taken into account for determining the amount of compensation required to be tendered under section 31, and where the amount so paid or deposited exceeds the compensation awarded by the Collector under section 11, the excess may, unless refunded within three months from the date of Collector's award, be recovered as an arrear of land revenue].

[(4) In the case of any land to which, in the opinion of the [appropriate Government], the provisions of sub-section (1) or sub-section (2) are applicable, the [appropriate Government] may direct that the provisions of section 5A shall not apply, and, if it does so direct, a declaration may be made under section 6 in respect of the land at any time [after the date of the publication of the notification] under section 4, sub-section (1).]

PART III

Reference to Court and Procedure Thereon

18. Reference to Court. - (1) Any person interested who has not accepted the award may, by written application to the Collector, require that the matter be referred by the Collector for the determination of the Court, whether his objection be to the measurement of the land, the amount of the compensation, the person to whom it is payable, or the apportionment of the compensation among the persons interested.

(2) The application shall state the grounds on which objection to the award is taken:

Provided that every such application shall be made-

(a) if the person making it was present or represented before the Collector at the time when he made his award, within six weeks from the date of the Collector's award;

(b) in other cases, within six weeks of the receipt of the notice from the Collector under section 12, sub-section (2), or within six months from the date of the Collector's award, whichever period shall first expire.

19. Collector's statement to the court. - (1) In making the reference, the Collector shall state for the information of the court, in writing under his hand -

(a) the situation and extent of the land, with particulars of any trees, buildings or standing crops thereon;

(b) the names of the persons whom he has reason to think interested in such land;

(c) the amount awarded for damages and paid or tendered under sections 5 and 17, or either of them, and the amount of compensation awarded under section 11;

[(cc) the amount paid or deposited under sub-section (3A) of section 17; and]

(d) if the objection be to the amount of the compensation, the grounds on which the amount of compensation was determined.

(2) To the said statement shall be attached a schedule giving the particulars of the notices served upon, and of the statements in writing made or delivered by the parties interested respectively.

20. Service of notice. - The Court shall thereupon cause a notice specifying the day on which the Court will proceed to determine the objection, and directing their appearance before the Court on that day, to be served on the following persons, namely: -

(a) the applicant;

(b) all persons interested in the objection, except such (if any) of them as have consented without protest to receive payment of the compensation awarded; and

(c) If the objection is in regard to the area of the land or to the amount of the compensation, the Collector.

21. Restriction on scope of proceedings. - The scope of the enquiry in every such proceeding shall be restricted to a consideration of the interest of the persons affected by the objection.

22. Proceedings to be in open Court. - Every such proceeding shall take place in open Court, and all persons entitled to practice in any Civil Court in the State shall be entitled to appear, plea and act (as the case may be) in such proceeding.

23. Matters to be considered on determining compensation. - (1) In determining the amount of compensation to be awarded for land acquired under this Act, the Court shall take into consideration-

first, the market-value of the land at the date of the publication of the [notification under section 4, sub-section (1)];

secondly, the damage sustained by the person interested, by reason of the taking of any standing crops trees which may be on the land at the time of the Collector's taking possession thereof;

thirdly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of serving such land from his other land;

fourthly, the damage (if any) sustained by the person interested, at the time of the Collector's taking possession of the land, by reason of the acquisition injuriously affecting his other property, movable or immovable, in any other manner, or his earnings;

fifthly, in consequence of the acquisition of the land by the Collector, the person interested is compelled to change his residence or place of business, the reasonable expenses (if any) incidental to such change, and

sixthly, the damage (if any) bona fide resulting from diminution of the profits of the land between the time of the publication of the declaration under section 6 and the time of the Collector's taking possession of the land.

[1A] In addition to the market value of the land, as above provided, the Court shall in every case award an amount calculated at the rate of twelve per centum per annum on such market value for the period commencing on and from the date of the publication of the notification under section 4, sub-section (1), in respect of such land to the date of the award of the Collector or the date of taking possession of the land, whichever is earlier.

Explanation. - In computing the period referred to in this sub-section, any period or periods during which the proceedings for the acquisition of the land were held up on account of any stay or injunction by the order of any Court shall be excluded.]

(2) In addition to the market value of the land as above provided, the Court shall in every case award a sum of [thirty per centum] on such market value, in consideration of the compulsory nature of the acquisition.

24. Matters to be neglected in determining compensation. - But the Court shall not take into consideration -

first, the degree of urgency which has led to the acquisition;

secondly, any disinclination of the person interested to part with the land acquired;

thirdly, any damage sustained by him which, if caused by a private person, would not render such person liable to a suit;

fourthly, any damage which is likely to be caused to the land acquired, after the date of the publication of the declaration under section 6, by or in consequence of the use to which it will be put;

fifthly, any increase to the value of the land acquired likely to accrue from the use to which it will be put when acquired;

sixthly, any increase to the value of the other land of the person interested likely to accrue from the use to which the land acquired will be put;

seventhly, any outlay or improvements on, or disposal of the land acquired, commenced, made or effected without the sanction of the Collector after the date of the publication of the [notification under section 4, sub-section (1); or]

[eighthly, any increase to the value of the land on account of its being put to any use, which is forbidden by law or opposed to public policy.]

[25. Amount of compensation awarded by Court not to be lower than the amount awarded by the Collector. - The amount of compensation awarded by the Court shall not be less than the amount awarded by the Collector under section 11.]

26. Forms of awards. - [(1)] Every award under this part shall be in writing signed by the Judge, and shall specify the amount awarded under clause first of sub-section (1) of section 23, and also the amounts (if any) respectively awarded under each of the other clauses of the same sub-section, together with the grounds of awarding each of the said amounts.

[(2) Every such award shall be deemed to be a decree and the statement of the grounds of every such award a judgment within the meaning of section 2, clause (2), and section 2, clause (9), respectively of the Code of Civil Procedure 1908 (5 of 1908).]

27. Costs. - (1) Every such award shall also state the amount of costs incurred in the proceeding under this Part, and by what persons and in what proportions they are to be paid.

(2) When the award of the Collector is not upheld, the cost shall ordinarily be paid by the Collector, unless the Court shall be opinion that the claim of the applicant was so extravagant or that he was so negligent in putting his case before the Collector that some deduction from his costs should be made or that he should pay a part of the Collector's costs.

28. Collector may be directed to pay interest on excess compensation. - If the sum, which the Collector did award as compensation, the award of the Court may direct that the collector shall pay interest on such excess at the rate of [nine per centum] per annum from the date on which he took possession of the land to the date of payment of such excess into Court:

[Provided that the award of the Court may also direct that where such excess or any part thereof is paid into Court after the date or expiry of a period of one year from the date on which possession is taken, interest at the rate of fifteen per centum per annum shall be payable from the date of expiry of the said period of one year on the amount of such excess or part thereof which has not been paid into Court before the date of such expiry.]

[28A. Re-determination of the amount of compensation on the basis of the award of the Court. - (1) where in an award under this part, the court allows to the applicant any amount of compensation in excess of the amount awarded by the collector under section 11, the persons interested in all the other land covered by the same notification under section 4, sub-section (1) and who are also aggrieved by the award of the Collector may, notwithstanding that they had not made an application to the Collector under section 18, by written application to the Collector within three months from the date of the award of the Court require that the amount of compensation payable to them may be re-determined on the basis of the amount of compensation awarded by the court:

Provided that in computing the period of three months within which an application to the Collector shall be made under this sub-section, the day on which the award was pronounced and the time requisite for obtaining a copy of the award shall be excluded.

(2) The Collector shall, on receipt of an application under sub-section (1), conduct an inquiry after

giving notice to all the persons interested and giving them a reasonable opportunity of being heard, and make an award determining the amount of compensation payable to the applicants.

(3) Any person who has not accepted the award under sub-section (2) may, by written application to the Collector, required that the matter be referred by the Collector for the determination of the Court and the provisions of sections 18 to 28 shall, so far as may be, apply to such reference as they apply to a reference under section 18.]

PART IV

Appointment of Compensation

29. Particulars of apportionment to be specified. - When there are several persons interested, if such persons agree in the apportionment of the compensation, the particulars of such apportionment shall be specified in the award, and as between such persons the award shall be conclusive evidence of the correctness of the apportionment.

30. Dispute as to apportionment. - When the amount of compensation has been settled under section 11, if any dispute arises as to the apportionment of the same or any part thereof, or as to the persons to whom the same or any part thereof, is payable, the Collector may refer such dispute to the decision of the Court.

PART V

Payment

31. Payment of compensation or deposit of same in Court. - (1) On making an award under section 11, the Collector shall tender payment of the compensation awarded by him to the persons interested entitled thereto according to the award and shall pay it to them unless prevented by some one or more of the contingencies mentioned in the next sub-section.

(2) If they shall not consent to receive it, or if there be no person competent to alienate the land, or if there be any dispute as to the title to receive the compensation or as to the apportionment of it, the Collector shall deposit the amount of the compensation in the Court to which a reference under section 18 would be submitted:

Provided that any person admitted to be interested may receive such payment under protest as to the sufficiency of the amount:

Provided also that no person who has received the amount otherwise than under protest shall be entitled to make any application under section 18:

Provided also that nothing herein contained shall affect the liability of any person, who may receive the whole or any part of any compensation awarded under this Act, to pay the same to the person lawfully entitled thereto.

(3) Notwithstanding anything in this section the Collector may, with the sanction of the [appropriate Government] instead of awarding a money compensation in respect of any land, make any arrangement with a person having a limited interest in such land, either by the grant of other lands in exchange, the remission of land-revenue on other lands held under the same title, or in such other way as may be equitable having regard to the interests of the parties concerned.

(4) Nothing in the last foregoing sub-section shall be construed to interfere with or limit the power of the Collector to enter into any arrangement with any person interested in the land and competent to contract in respect thereof.

32. Investment of money deposited in respect of lands belonging to person incompetent to alternate. - (1) If any money shall be deposited in Court under sub-section (2) of the last preceding section and it appears that the land in respect whereof the same was awarded belonged to any person who had no power to alienate the same, the Court shall-

(a) order the money to be invested in the purchase of other lands to be held under the like title and conditions of ownership as the land in respect of which such money shall have been deposited was held, or

(b) if such purchase cannot be effected forthwith, then in such Government of other approved securities as the Court shall think fit;

and shall direct the payment of the interest or other proceeds arising from such investment to the person or persons who would for the time being have been entitled to the possession of the said land, and such moneys shall remain so deposited and invested until the same be applied-

(i) in the purchase of such other lands as aforesaid; or

(ii) in payment to any person or persons becoming absolutely entitled thereto.

(2) In all cases of money deposited to which this section applies the Court shall order the costs of the following matters, including therein all reasonable charge and expenses incident thereon, to be paid by the Collector, namely: -

(a) the costs of such investments as aforesaid;

(b) the costs of the orders for the payment of the interest or other proceeds of the securities upon which such moneys are for the time being invested, and for the payment out of Court of the principal of such moneys, and of all proceedings relating thereto, except such as may be occasioned by litigation between adverse claimants.

33. Investment of money deposited in other cases. - When any money shall have been deposited in Court under this Act for any cause other than mentioned in the last preceding section, the court may, on the application of any party interested or claiming an interest in such money, order the same to be invested in such Government or other approved securities as it may think proper, and paid in such manner as it may consider will give the parties interested therein the same benefit the reform as they might have had from the land in respect whereof such money shall have been deposited or as near thereto as may be.

34. Payment of interest - When the amount of such compensation is not paid or deposited on or before taking possession of the land, the Collector shall pay the amount awarded with interest thereon at the rate of [nine per centum] per annum from the time of so taking possession until it shall have been so paid or deposited:

[Provided that if such compensation or any part thereof is not paid or deposited within a period of

one year from the date on which possession is taken, interest at the rate of fifteen per centum per annum shall be payable from the date of expiry of the said period of one year on the amount of compensation or part thereof which has not been paid or deposited before the date of such expiry.]

PART VI

TEMPORARY OCCUPATION OF LAND

35. Temporary occupation of waste or arable land. Procedure when difference as to compensation exists. - (1) Subject to the provisions of Part VII of this Act, whenever it appears to the [appropriate Government] that the temporary occupation and use of any waste or arable land are needed for any public purpose, or for a Company, the [appropriate Government] may direct the Collector to procure the occupation and use of the same for such term as it shall think fit, not exceeding three years from the commencement of such occupation.

(2) The Collector shall thereupon give notice in writing to the person interested in such land of the purpose for which the same is needed, and shall, for the occupation and use thereof for such term as aforesaid, and for the materials (if any) to be taken there from, pay to them such compensation, either in a gross sum of money, or by monthly or other periodical payments, as shall be agreed upon in writing between him and such persons respectively.

(3) In case the Collector and the persons interested differ as to the sufficiency of the compensation or apportionment thereof, the Collector shall refer such difference to the decision of the Court.

*36. Power to enter and take possession and compensation on restoration. - (1) On payment of such compensation, or on executing such agreement, or on making a reference under section 35, the collector may enter upon and take possession of the land, and use or permit the use thereof in accordance with the terms of the said notice.

(2) On the expiration of the term, the Collector shall make or tender to the persons interested compensation for the damage (if any) done to the land and not provided for by the agreement, and shall restore the land to the persons interested therein:

Provided that, if the land has become permanently unfit to be used for the purpose for which it was used immediately before the commencement of such term, and if the persons interested shall so require, the [appropriate Government] shall proceed under this Act to acquire the land as if it was needed permanently for a public purpose or for a Company.

37. Difference as to condition of land. - In case the Collector and persons interested differ as to the condition of the land at the expiration of the term, or as to any matter connected with the said agreement, the Collector shall refer such difference to the decision of the Court.

PART VII

Acquisition of Land for Companies

38. [Company may be authorized to enter and survey]. Rep. by the Land Acquisition (Amendment) Act, 1984 (68 of 1984), s.21.

[38A. Industrial concern to be deemed Company for certain purposes. - An industrial concern, ordinarily employing not less than one hundred workmen owned by an individual or by an association of individuals and not being a Company, desiring to acquire land for the erection of dwelling houses for workmen employed by the concern or for the provision of amenities directly connected therewith shall, so far as concerns the acquisition of such land, be deemed to be a Company for the purposes of this Part, and the references to Company in [sections 4, 5A, 6, 7 and 50] shall be interpreted as references also to such concern]

39. Previous consent of appropriate Government and execution of agreement necessary. - The provisions of [sections 6 to 16 (both inclusive) and sections 18 to 37 (both inclusive)] shall not be put in force in order to acquire land for any company [under this Part], unless with the previous consent of the [appropriate Government], not unless the Company shall have executed the agreement hereinafter mentioned.

40. Previous enquiry. - (1) Such consent shall not be given unless the [appropriate Government] be satisfied, [either on the report of the Collector under section 5A, sub-section (2), or] by an enquiry held as hereinafter provided, -

[a) that the purpose of the acquisition is to obtain land for the erection of dwelling houses for workmen employed by the Company or for the provision of amenities directly connected therewith, or

[aa) that such acquisition is needed for the construction of some building or work for a Company which is engaged or is taking steps for engaging itself in any industry or work which is for a public purpose, or]

[b) that such acquisition is needed for the construction of some work, and that such work is likely to prove useful to the public].

(2) Such enquiry shall be held by such officer and at such time and place as the [appropriate Government] shall appoint:

(3) Such officer may summon and enforce the attendance of witnesses and compel the production of documents by the same means and, as far as possible, in the same manner as is provided by the [Code of Civil Procedure, 1908 (5 of 1908)] in the case of a Civil Court.

41. Agreement with appropriate Government. - If the [appropriate Government] is satisfied [after considering the report, if any, of the Collector under section 5A, sub-section (2), or on the report of the officer making an inquiry under section 40] that [the proposed acquisition is for any of the purposes referred to in clause (a) or clause (aa) or clause (b) of sub-section (1) of section 40], it shall require the Company to enter into an agreement [with the [appropriate Government]], providing to the satisfaction of the [appropriate Government] for the following matters, namely :-

(1) the - [payment to the [appropriate Government]] of the cost of the acquisition;

(2) the transfer, on such payment, of the land to the Company.

(3) the terms on which the land shall be held by the Company,

[(4) where the acquisition is for the purpose of erecting dwelling houses or the provision of amenities connected therewith, the time within which, the conditions on which and the manner in which the dwelling houses or amenities shall be erected or provided;

[(4A) where the acquisition is for the construction of any building or work for a Company which is engaged or is taking steps for engaging itself in any industry or work which is for a public purpose, the time within which, and the conditions on which, the building or work shall be constructed or executed; and]

(5) where the acquisition is for the construction of any other work, the time within which and the conditions on which the work shall be executed and maintained and the terms on which the public shall be entitled to use the work.]

42. Publication of agreement. - Every such agreement shall, as soon as may be after its execution, be published in the official Gazette, and shall thereupon (so far as regards the terms on which the public shall be entitled to use the work) have the same effect as if it had formed part of this Act.

43. Section 39 to 42 not to apply where Government bound by agreement to provide land for Companies. - The provisions of sections 39 to 42, both inclusive, shall not apply and the corresponding sections of Land Acquisition Act, 1870 (10 of 1870), shall be deemed never to have applied, to the acquisition of land for any Railway or other Company, for the purposes of which, [under any agreement with such Company, the secretary of State for India in Council, the Secretary of State, [the Central Government or any State Government] is or was bound to provide land].

*** 44. How agreement with Railway Company may be proved.** - In the case of the acquisition of land for the purpose of a Railway Company, the existence of such an agreement as is mentioned in section 43 may be proved by the production of a printed copy thereof purporting to be printed by order of Government.

[44A. Restriction on transfer, etc. - No Company for which any land is acquired under this Part shall be entitled to transfer the said land or any part thereof by sale, mortgage, gift, lease or otherwise except with the previous sanction of the appropriate Government.

44B. Land not to be acquired under this Part except for certain purpose for private companies other than Government companies. - Notwithstanding anything contained in this Act, no land shall be acquired under this Part, except for the purpose mentioned in clause (a) of sub-section (1) of section 40, for a private company, which is not a Government company.

Explanation. - "Private company" and "Government company" shall have the meaning respectively assigned to them in the Companies Act, 1956 (1 of 1956).]

PART VIII MISCELLANEOUS

45. Service of notices. - (1) Service of any notice under this Act shall be made by delivering or tendering a copy thereof signed, in the case of a notice section 4, by the officer therein mentioned, and, in the case of any notice, by or by order of the Collector or the Judge.

(2) Whenever it may be practicable, the service of the notice shall be made on the person therein named.

(3) When such person cannot be found, the service may be made on any adult male member of his family residing with him; and, if no such adult male member can be found, the notice may be served by fixing the copy on the outer door of the house in which the person therein named ordinarily dwells or carries on business, or by fixing a copy thereof in some conspicuous place in the office of the officer aforesaid or of the Collector or in the court-house, and also in some conspicuous part of the land to be acquired :

Provided that, if the Collector or Judge shall so direct, a notice may be sent by post, in a letter addressed to the person named therein at his last known residence, address or place of business and 6[registered under sections 28 and 29 of the Indian Post Office Act, 1898 (6 of 1898), and service of it may be proved by the production of the addressee's receipt.

46. Penalty for obstructing acquisition of land. - Whoever willfully obstructs any person in doing any of the acts authorized by section 4 or section 8, or willfully fills up, destroys, damages or displaces any trench or mark made under section 4, shall, on conviction before a Magistrate, be liable to imprisonment for any term not exceeding one month, or to fine not exceeding 1[five hundred rupees], or to both.

47. Magistrate to enforce surrender. - If the Collector is opposed or impeded in taking possession under this Act of any land, he shall, if a Magistrate, enforce the surrender of the land to himself, and if not a Magistrate, he shall apply to a Magistrate or (within the towns of Calcutta, Madras and Bombay) to the Commissioner of Police, and such Magistrate or Commissioner (as the case may be) shall enforce the surrender of the land to the Collector.

48. Completion of acquisition not compulsory, but compensation to be awarded when not completed. - (1) Except in the case provided for in section 36, the Government shall be at liberty to withdraw from the acquisition of any land of which possession has not been taken.

(2) Whenever the Government withdraws from any such acquisition, the Collector shall determine the amount of compensation due for the damage suffered by the owner in consequence of the notice or of any proceedings there under, and shall pay such amount to the person interested, together with all costs reasonably incurred by him in the prosecution of the proceedings under this Act relating to the said land.

(3) The provision of Part III of this Act shall apply, so far as may be, to the determination of the compensation payable under this section.

49. Acquisition of part of house or building. - (1) The provisions of this Act shall not be put in force for the purpose of acquiring a part only of any house, manufactory or other building, if the owner desires that the whole of such house, manufactory or building shall be so acquired:

Provided also that, if any question shall arise as to whether any land proposed to be taken under this Act does or does not form part of a house, manufactory or building within the meaning of this section, the Collector shall refer the determination of such question to the Court and shall not be take possession of such land until after the question has been determined.

In deciding on such a reference the Court shall have regard to the question whether the land proposed to be taken, is reasonably require for the full and unimpaired use of the house, manufactory or building.

(2) If, in the case of any claim under section 23, sub-section (1), thirdly, by a person interested, on account of the severing of the land to be acquired from his other land, the [appropriate Government] is of opinion that the claim is unreasonable or excessive, it may, at any time before the Collector has made his award, order the acquisition of the whole of the land of which the land first sought to be acquired forms a part.

(3) In the case last hereinbefore provided for, no fresh declaration or other proceedings under sections 6 to 10, both inclusive, shall be necessary; but the Collector shall without delay furnish a copy of the order of the [appropriate Government] to the person interested, and shall thereafter proceed to make his award under section 11.

50. Acquisition of land at cost of a local authority or Company. - (1) Where the provisions of this Act are put in force for the purpose of acquiring land at the cost of any fund controlled or managed by a local authority or of any Company, the charges of and incidental to such acquisition shall be defrayed from or by such fund or company.

(2) In any proceeding held before a Collector or Court in such cases the local authority or Company concerned may appear and adduce evidence for the purpose of determining the amount of compensation.

Provided that no such local authority or Company shall be entitled to demand a reference under section 18.

51. Exemption from stamp duty and fees. - No award or agreement made under this Act shall be chargeable with stamp duty, and no person claiming under any such award or agreement shall be liable to pay any fee for a copy of the same.

[51A. Acceptance of certified copy as evidence. - In any proceeding under this Act, a certified copy of a document registered under the Regulation Act, 1908 (16 of 1908), including a copy given under section 57 of that Act, may be accepted as evidence of the transaction recorded in such document].

52. Notice in case of suits for anything done in pursuance of Act. - No suit or other proceeding shall be commenced or prosecuted against any person for anything done in pursuance of this Act, without giving to such person a month's previous notice in writing of the intended proceeding, and of the cause thereof, nor after tender of sufficient amends.

53. Code of Civil Procedure to apply to proceedings before Court - Save in so far as they may be inconsistent with anything contained in this Act, the provisions of the [Code of Civil Procedure, 1908 (5 of 1908)], shall apply to all proceedings before the Court under this Act.

[54. Appeals in proceedings before Court. - Subject to the provisions of the Code of Civil Procedure, 1908 (5 of 1908), applicable to appeals from original decrees, and notwithstanding anything to the contrary in any enactment for the time being in force, an appeal shall only lie in any proceedings under this Act to the High Court from the award, or from any part of the award, of the Court and from any decree of the High Court passed on such appeal as aforesaid an appeal

shall lie to 4[the Supreme Court] subject to the provisions contained in section 110 of the Code of Civil Procedure, 1908, and in Order XLV thereof.]

55. Power to make rules. - (1) The [appropriate Government] shall have power to make rules consistent with this Act for the guidance of officers in all matters connected with its enforcement, and may from time to time alter and add to the rules so made:

[Provided that the power to make rules for carrying out the purposes of Part VII of this Act shall be exercisable by the Central Government and such rules may be made for the guidance of the State Governments and the officers of the Central Government and of the State Governments:

Provided further that every such rule made by the Central Government shall be laid as soon as may be after it is made, before each House of parliament while it is in session for a total period of thirty days which may be comprised in one session or two or more successive sessions, and if, [before the expiry of the session immediately following the session or the successive sessions aforesaid], both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so however that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule :]

[Provided also that every such rule made by the State Government shall be laid, as soon as may be after it is made, before the State Legislature.]

(2) The power to make, alter and add to rules under sub-section (1) shall be subject to the conditions of the rules, being made, altered or added to after previous publication.

(3) All such rules, alterations and additions shall be published in the Official Gazette, and shall thereupon have the force of law.

ANNEXURE

Exact from the Land Acquisition (Amendment) Act, (1962)

(31 of 1962)

7. Validation of certain actuations.- Notwithstanding any judgment ,decree per order of any court, every actuation of land for a company made or purporting to have been made under part VII of the principle Act before the 20th day of July 1962 , shall,in so far as such acquisition is not for any of the purposes mentioned in clause (a) or clause (b) of sub-section (1) of section 40 of the principal Act, be deemed to have been made for the purpose mentioned in clause (aa) of the said sub-section, and accordingly every such acquisition and any proceeding, order, agreement or action in connection with such acquisition shall be, and shall be deemed always to have been, as valid as if the provisions of section 40 and 41 of the principal Act, as amended by this Act, were in force at all material times when such acquisition was made or proceeding was held or order was made or agreement was entered into or action was taken.

Explanation - In this section "Company" has the same meaning as in clause (c) of section 3 of the principal Act as amended by this Act.

The Land Acquisition (Amendment) Act, 1984 - Extract of Section 30 - Transitional provisions.

30(1) The provisions of sub-section (1A) of section 23 of the principal Act, as inserted by Clause (a) of section 15 of this Act, shall apply, and shall be deemed to have applied, also to and in relation to-

(a) every proceeding for the acquisition of any land under the principal Act pending on the 30th day of April, 1982 (the date of introduction of the Land Acquisition (Amendment) Bill in the House of people) in which no award has been made by the Collector before that date;

(b) every proceeding for the acquisition of any land under the principal Act commenced after that date, whether or not an award has been made by the Collector before the commencement of this Act.

(2) The provisions of sub-section (2) of section 23 and section 28 of the principal Act, as amended by clause (b) of section 15 and section 18 of this Act respectively, shall apply, and shall be deemed to have applied, also to, and relation to, any award made by the Collector or Court or to any order passed, by the High Court or Supreme Court in appeal against any such award under the provisions of the principal Act after the 30th day of April 1982 (the date of introduction of the Land Acquisition (Amendment) Bill 1982, in the House of the People and before the commencement of this Act.

(3) The provisions of section 34 of the principal Act, as amended by section 20 of this Act, shall apply, and shall be deemed to have applied, also to, and in relation to,

(a) every case in which possession of any land acquired under the principal Act had been taken before the 30th of April, 1982 (the date of introduction of the Land Acquisition (Amendment) Bill 1982, in the House of the People), and the amount of compensation for such acquisition had not been paid or deposited under section 31 of the principal Act until such date, with effect on and from that date; and

(b) every case in which such possession had been taken on or after that date but before the commencement of this Act without the amount of compensation having been paid or deposited under the said section 31 with effect on and from the date of taking such possession.

OP 4.12 - Involuntary Resettlement

These policies were prepared for use by World Bank staff and OP 4.12 are not necessarily a complete treatment of the subject. December, 2001

This Operational Policy statement was updated in February 2011 to clarify the use of Use of Escrow Accounts in order to Help Reduce Delays in Implementation of Resettlement, and Clarification of Funding of Grievance Mechanisms. It was previously revised in March 2007 to reflect the issuance of [OP/BP 8.00, *Rapid Response to Crises and Emergencies*](#), and in August 2004 to ensure consistency with the requirements of [OP/BP 8.60](#). Questions on this policy may be addressed to [OPCS Quality Assurance and Compliance \(OPCQC\)](#).

Note: OP and [BP 4.12](#) together replace OD 4.30, *Involuntary Resettlement*. These OP and BP apply to all projects for which a Project Concept Review takes place on or after January 1, 2002. Questions may be addressed to the Director, [Social Development Department](#) (SDV).

Revised February 2011

1. Bank¹ experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. This policy includes safeguards to address and mitigate these impoverishment risks.

Policy Objectives

2. Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. For these reasons, the overall objectives of the Bank's policy on involuntary resettlement are the following:

(a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.²

(b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons³ should be meaningfully consulted and should have

opportunities to participate in planning and implementing resettlement programs.

(c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.⁴

Impacts Covered

3 . This policy covers direct economic and social impacts⁵ that both result from Bank-assisted investment projects,⁶ and are caused by

(a) the involuntary⁷ taking of land⁸ resulting in

(i) relocation or loss of shelter;

(ii) lost of assets or access to assets; or

(iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or

(b) the involuntary restriction of access⁹ to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons.

4. This policy applies to all components of the project that result in involuntary resettlement, regardless of the source of financing. It also applies to other activities resulting in involuntary resettlement, that in the judgment of the Bank, are

(a) directly and significantly related to the Bank-assisted project,

(b) necessary to achieve its objectives as set forth in the project documents; and

(c) carried out, or planned to be carried out, contemporaneously with the project.

5. Requests for guidance on the application and scope of this policy should be addressed to the Resettlement Committee (see [BP 4.12, para. 7](#)).¹⁰

Required Measures

6. To address the impacts covered under para. 3 (a) of this policy, the borrower prepares a resettlement plan or a resettlement policy framework (see paras. 25-30) that covers the following:

(a) The resettlement plan or resettlement policy framework includes measures to ensure that the displaced persons are

- (i) informed about their options and rights pertaining to resettlement;
 - (ii) consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
 - (iii) provided prompt and effective compensation at full replacement cost¹¹ for losses of assets¹² attributable directly to the project.
- (b) If the impacts include physical relocation, the resettlement plan or resettlement policy framework includes measures to ensure that the displaced persons are
- (i) provided assistance (such as moving allowances) during relocation; and
 - (ii) provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the old site.¹³
- (c) Where necessary to achieve the objectives of the policy, the resettlement plan or resettlement policy framework also include measures to ensure that displaced persons are
- (i) offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living;¹⁴ and
 - (ii) provided with development assistance in addition to compensation measures described in paragraph 6(a);
 - (iii) such as land preparation, credit facilities, training, or job opportunities.

7. In projects involving involuntary restriction of access to legally designated parks and protected areas (see para. 3(b)), the nature of restrictions, as well as the type of measures necessary to mitigate adverse impacts, is determined with the participation of the displaced persons during the design and implementation of the project. In such cases, the borrower prepares a process framework acceptable to the Bank, describing the participatory process by which

- (a) specific components of the project will be prepared and implemented;
- (b) the criteria for eligibility of displaced persons will be determined;
- (c) measures to assist the displaced persons in their efforts to improve their livelihoods, or at least to restore them, in real terms, while maintaining the sustainability of the park or protected area, will be identified; and

(d) potential conflicts involving displaced persons will be resolved.

The process framework also includes a description of the arrangements for implementing and monitoring the process.

8. To achieve the objectives of this policy, particular attention is paid to the needs of vulnerable groups among those displaced, especially those below the poverty line, the landless, the elderly, women and children, indigenous peoples,¹⁵ ethnic minorities, or other displaced persons who may not be protected through national land compensation legislation.

9. Bank experience has shown that resettlement of indigenous peoples with traditional land-based modes of production is particularly complex and may have significant adverse impacts on their identity and cultural survival. For this reason, the Bank satisfies itself that the borrower has explored all viable alternative project designs to avoid physical displacement of these groups. When it is not feasible to avoid such displacement, preference is given to land-based resettlement strategies for these groups (see para. 11) that are compatible with their cultural preferences and are prepared in consultation with them (see [Annex A, para. 11](#)).

10. The implementation of resettlement activities is linked to the implementation of the investment component of the project to ensure that displacement or restriction of access does not occur before necessary measures for resettlement are in place. For impacts covered in para. 3(a) of this policy, these measures include provision of compensation and of other assistance required for relocation, prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required. In particular, taking of land and related assets may take place only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons. For impacts covered in para. 3(b) of this policy, the measures to assist the displaced persons are implemented in accordance with the plan of action as part of the project (see para. 30).¹⁶

11. Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based. These strategies may include resettlement on public land (see footnote 1 above), or on private land acquired or purchased for resettlement. Whenever replacement land is offered, resettlers are provided with land for which a combination of productive potential, locational advantages, and other factors is at least equivalent to the advantages of the land taken. If land is not the preferred option of the displaced persons, the provision of land would adversely affect the sustainability of a park or protected area,¹⁷ or sufficient land is not available at a reasonable price, non-land-based options built around opportunities for employment or self-employment should be provided in addition to cash compensation for land and other assets lost. The lack of adequate land must be demonstrated and documented to the satisfaction of the Bank.

12. Payment of cash compensation for lost assets may be appropriate where (a)

livelihoods are land-based but the land taken for the project is a small fraction¹⁸ of the affected asset and the residual is economically viable; (b) active markets for land, housing, and labor exist, displaced persons use such markets, and there is sufficient supply of land and housing; or (c) livelihoods are not land-based. Cash compensation levels should be sufficient to replace the lost land and other assets at full replacement cost in local markets.

13. For impacts covered under para. 3(a) of this policy, the Bank also requires the following:

(a) Displaced persons and their communities, and any host communities receiving them, are provided timely and relevant information, consulted on resettlement options, and offered opportunities to participate in planning, implementing, and monitoring resettlement. Appropriate and accessible grievance mechanisms are established for these groups.

(b) In new resettlement sites or host communities, infrastructure and public services are provided as necessary to improve, restore, or maintain accessibility and levels of service for the displaced persons and host communities. Alternative or similar resources are provided to compensate for the loss of access to community resources (such as fishing areas, grazing areas, fuel, or fodder).

(c) Patterns of community organization appropriate to the new circumstances are based on choices made by the displaced persons. To the extent possible, the existing social and cultural institutions of resettlers and any host communities are preserved and resettlers' preferences with respect to relocating in preexisting communities and groups are honored.

Eligibility for Benefits¹⁹

14. Upon identification of the need for involuntary resettlement in a project, the borrower carries out a census to identify the persons who will be affected by the project (see the [Annex A, para. 6\(a\)](#)), to determine who will be eligible for assistance, and to discourage inflow of people ineligible for assistance. The borrower also develops a procedure, satisfactory to the Bank, for establishing the criteria by which displaced persons will be deemed eligible for compensation and other resettlement assistance. The procedure includes provisions for meaningful consultations with affected persons and communities, local authorities, and, as appropriate, nongovernmental organizations (NGOs), and it specifies grievance mechanisms.

15. *Criteria for Eligibility.* Displaced persons may be classified in one of the following three groups:

(a) those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);

(b) those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets--provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan (see [Annex A, para. 7\(f\)](#)); and²⁰

(c) those who have no recognizable legal right or claim to the land they are occupying.

16. Persons covered under para. 15(a) and (b) are provided compensation for the land they lose, and other assistance in accordance with para. 6. Persons covered under para. 15(c) are provided resettlement assistance²¹ in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in this policy, if they occupy the project area prior to a cut-off date established by the borrower and acceptable to the Bank.²² Persons who encroach on the area after the cut-off date are not entitled to compensation or any other form of resettlement assistance. All persons included in para. 15(a), (b), or (c) are provided compensation for loss of assets other than land.

Resettlement Planning, Implementation, and Monitoring

17. To achieve the objectives of this policy, different planning instruments are used, depending on the type of project:

(a) a resettlement plan or abbreviated resettlement plan is required for all operations that entail involuntary resettlement unless otherwise specified (see para. 25 and [Annex A](#));

(b) a resettlement policy framework is required for operations referred to in paras. 26-30 that may entail involuntary resettlement, unless otherwise specified (see [Annex A](#); and

(c) a process framework is prepared for projects involving restriction of access in accordance with para. 3(b) (see para. 31).

18. The borrower is responsible for preparing, implementing, and monitoring a resettlement plan, a resettlement policy framework, or a process framework (the "resettlement instruments"), as appropriate, that conform to this policy. The resettlement instrument presents a strategy for achieving the objectives of the policy and covers all aspects of the proposed resettlement. Borrower commitment to, and capacity for, undertaking successful resettlement is a key determinant of Bank involvement in a project.

19. Resettlement planning includes early screening, scoping of key issues, the choice of resettlement instrument, and the information required to prepare the resettlement component or subcomponent. The scope and level of detail of the resettlement instruments vary with the magnitude and complexity of resettlement. In preparing the resettlement component, the borrower draws on appropriate social, technical, and legal expertise and on relevant community-based organizations and NGOs.²³ The borrower informs potentially displaced persons at an early stage about the resettlement aspects of

the project and takes their views into account in project design.

20. The full costs of resettlement activities necessary to achieve the objectives of the project are included in the total costs of the project. The costs of resettlement, like the costs of other project activities, are treated as a charge against the economic benefits of the project; and any net benefits to resettlers (as compared to the "without-project" circumstances) are added to the benefits stream of the project. Resettlement components or free-standing resettlement projects need not be economically viable on their own, but they should be cost-effective.

21. The borrower ensures that the Project Implementation Plan is fully consistent with the resettlement instrument.

22. As a condition of appraisal of projects involving resettlement, the borrower provides the Bank with the relevant draft resettlement instrument which conforms to this policy, and makes it available at a place accessible to displaced persons and local NGOs, in a form, manner, and language that are understandable to them. Once the Bank accepts this instrument as providing an adequate basis for project appraisal, the Bank makes it available to the public through its InfoShop. After the Bank has approved the final resettlement instrument, the Bank and the borrower disclose it again in the same manner.²⁴

23. The borrower's obligations to carry out the resettlement instrument and to keep the Bank informed of implementation progress are provided for in the legal agreements for the project.

24. The borrower is responsible for adequate monitoring and evaluation of the activities set forth in the resettlement instrument. The Bank regularly supervises resettlement implementation to determine compliance with the resettlement instrument. Upon completion of the project, the borrower undertakes an assessment to determine whether the objectives of the resettlement instrument have been achieved. The assessment takes into account the baseline conditions and the results of resettlement monitoring. If the assessment reveals that these objectives may not be realized, the borrower should propose follow-up measures that may serve as the basis for continued Bank supervision, as the Bank deems appropriate (see also [BP 4.12, para. 16](#)).

Resettlement Instruments

Resettlement Plan

25. A draft resettlement plan that conforms to this policy is a condition of appraisal (see [Annex A, paras. 2-21](#)) for projects referred to in para. 17(a) above.²⁵ However, where impacts on the entire displaced population are minor,²⁶ or fewer than 200 people are displaced, an abbreviated resettlement plan may be agreed with the borrower (see [Annex A, para. 22](#)). The information disclosure procedures set forth in para. 22

apply.

Resettlement Policy Framework

26. For sector investment operations that may involve involuntary resettlement, the Bank requires that the project implementing agency screen subprojects to be financed by the Bank to ensure their consistency with this OP. For these operations, the borrower submits, prior to appraisal, a resettlement policy framework that conforms to this policy (see [Annex A, paras. 23-25](#)). The framework also estimates, to the extent feasible, the total population to be displaced and the overall resettlement costs.

27. For financial intermediary operations that may involve involuntary resettlement, the Bank requires that the financial intermediary (FI) screen subprojects to be financed by the Bank to ensure their consistency with this OP. For these operations, the Bank requires that before appraisal the borrower or the FI submit to the Bank a resettlement policy framework conforming to this policy (see [Annex A, paras. 23-25](#)). In addition, the framework includes an assessment of the institutional capacity and procedures of each of the FIs that will be responsible for subproject financing. When, in the assessment of the Bank, no resettlement is envisaged in the subprojects to be financed by the FI, a resettlement policy framework is not required. Instead, the legal agreements specify the obligation of the FIs to obtain from the potential subborrowers a resettlement plan consistent with this policy if a subproject gives rise to resettlement. For all subprojects involving resettlement, the resettlement plan is provided to the Bank for approval before the subproject is accepted for Bank financing.

28. For other Bank-assisted project with multiple subprojects²⁷ that may involve involuntary resettlement, the Bank requires that a draft resettlement plan conforming to this policy be submitted to the Bank before appraisal of the project unless, because of the nature and design of the project or of a specific subproject or subprojects (a) the zone of impact of subprojects cannot be determined, or (b) the zone of impact is known but precise sitting alignments cannot be determined. In such cases, the borrower submits a resettlement policy framework consistent with this policy prior to appraisal (see [Annex A, paras. 23-25](#)). For other subprojects that do not fall within the above criteria, a resettlement plan conforming to this policy is required prior to appraisal.

29. For each subproject included in a project described in para. 26, 27, or 28 that may involve resettlement, the Bank requires that a satisfactory resettlement plan or an abbreviated resettlement plan that is consistent with the provisions of the policy framework be submitted to the Bank for approval before the subproject is accepted for Bank financing.

30. For projects described in paras. 26-28 above, the Bank may agree, in writing, that subproject resettlement plans may be approved by the project implementing agency or a responsible government agency or financial intermediary without prior Bank review, if that agency has demonstrated adequate institutional capacity to review resettlement plans and ensure their consistency with this policy. Any such delegation, and

appropriate remedies for the entity's approval of resettlement plans found not to be in compliance with Bank policy, are provided for in the legal agreements for the project. In all such cases, implementation of the resettlement plans is subject to ex post review by the Bank.

Process Framework

31. For projects involving restriction of access in accordance with para. 3(b) above, the borrower provides the Bank with a draft process framework that conforms to the relevant provisions of this policy as a condition of appraisal. In addition, during project implementation and before enforcing of the restriction, the borrower prepares a plan of action, acceptable to the Bank, describing the specific measures to be undertaken to assist the displaced persons and the arrangements for their implementation. The plan of action could take the form of a natural resources management plan prepared for the project.

Assistance to the Borrower

32. In furtherance of the objectives of this policy, the Bank may at a borrower's request support the borrower and other concerned entities by providing

- (a) assistance to assess and strengthen resettlement policies, strategies, legal frameworks, and specific plans at a country, regional, or sectoral level;
- (b) financing of technical assistance to strengthen the capacities of agencies responsible for resettlement, or of affected people to participate more effectively in resettlement operations;
- (c) financing of technical assistance for developing resettlement policies, strategies, and specific plans, and for implementation, monitoring, and evaluation of resettlement activities; and
- (d) financing of the investment costs of resettlement.

33. The Bank may finance either a component of the main investment causing displacement and requiring resettlement, or a free-standing resettlement project with appropriate cross-conditionalities, processed and implemented in parallel with the investment that causes the displacement. The Bank may finance resettlement even though it is not financing the main investment that makes resettlement necessary.

"Bank" includes IBRD and IDA; "loans" includes IDA credits and IDA grants, guarantees, Project Preparation Facility (PPF) advances and grants; and "projects" includes projects under (a) adaptable program lending; (b) learning and innovation

loans; (c) PPFs and Institutional Development Funds (IDFs), if they include investment activities; (d) grants under the Global Environment Facility and Montreal Protocol, for which the Bank is the implementing/executing agency; and (e) grants or loans provided by other donors that are administered by the Bank. The term "project" does not include programs under development policy lending operations. "Borrower" also includes, wherever the context requires, the guarantor or the project implementing agency.

In devising approaches to resettlement in Bank-assisted projects, other Bank policies should be taken into account, as relevant. These policies include [OP 4.01](#), *Environmental Assessment*, [OP 4.04](#), *Natural Habitats*, [OP 4.10](#), *Indigenous Peoples*, and [OP 4.11](#), *Physical Cultural Resources*.

The term "displaced persons" refers to persons who are affected in any of the ways described in para. 3 of this OP.

Displaced persons under para. 3(b) should be assisted in their efforts to improve or restore their livelihoods in a manner that maintains the sustainability of the parks and protected areas.

Where there are adverse indirect social or economic impacts, it is good practice for the borrower to undertake a social assessment and implement measures to minimize and mitigate adverse economic and social impacts, particularly upon poor and vulnerable groups. Other environmental, social, and economic impacts that do not result from land taking may be identified and addressed through environmental assessments and other project reports and instruments.

This policy does not apply to restrictions of access to natural resources under community-based projects, i.e. where the community using the resources decides to restrict access to these resources, provided that an assessment satisfactory to the Bank establishes that the community decision-making process is adequate, and that it provides for identification of appropriate measures to mitigate adverse impacts, if any, on the vulnerable members of the community. This policy also does not cover refugees from natural disasters, war, or civil strife (see [OP/BP 8.00](#), *Rapid Response to Crises and Emergencies*).

For the purposes of this policy, "involuntary" means actions that may be taken without the displaced person's informed consent or power of choice.

"Land" includes anything growing on or permanently affixed to land, such as buildings and crops. This policy does not apply to regulations of natural resources on a national or regional level to promote their sustainability, such as watershed management, groundwater management, fisheries management, etc. The policy also does not apply to disputes between private parties in land titling projects, although it is good practice for the borrower to undertake a social assessment and implement measures to minimize and mitigate adverse social impacts, especially those affecting poor and vulnerable groups.

For the purposes of this policy, involuntary restriction of access covers restrictions on the use of resources imposed on people living outside the park or protected area, or on those who continue living inside the park or protected area during and after project implementation. In cases where new parks and protected areas are created as part of the project, persons who lose shelter, land, or other assets are covered under para. 3(a). Persons who lose shelter in existing parks and protected areas are also covered under para. 3(a).

The *Involuntary Resettlement Sourcebook* provides good practice guidance to staff on the policy.

"Replacement cost" is the method of valuation of assets that helps determine the amount sufficient to replace lost assets and cover transaction costs. In applying this method of valuation, depreciation of structures and assets should not be taken into account (for a detailed definition of replacement cost, see [Annex A](#), footnote 1). For losses that cannot easily be valued or compensated for in monetary terms (e.g., access to public services, customers, and suppliers; or to fishing, grazing, or forest areas), attempts are made to establish access to equivalent and culturally acceptable resources and earning opportunities. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures necessary to meet the replacement cost standard. Such additional assistance is distinct from resettlement assistance to be provided under other clauses of para. 6.

If the residual of the asset being taken is not economically viable, compensation and other resettlement assistance are provided as if the entire asset had been taken.

The alternative assets are provided with adequate tenure arrangements. The cost of alternative residential housing, housing sites, business premises, and agricultural sites to be provided can be set off against all or part of the compensation payable for the corresponding asset lost.

Such support could take the form of short-term jobs, subsistence support, salary maintenance or similar arrangements.

See [OP 4.10](#), *Indigenous Peoples*.

Where the borrower has offered to pay compensation to an affected person in accordance with an approved resettlement plan, but the offer has been rejected, the taking of land and related assets may only proceed if the borrower has deposited funds equal to the offered amount plus 10 percent in a secure form of escrow or other interest-bearing deposit acceptable to the Bank, and has provided a means satisfactory to the Bank for resolving the dispute concerning said offer of compensation in a timely and equitable manner.

See [OP 4.04](#), *Natural Habitats*.

As a general principle, this applies if the land taken constitutes less than 20% of the total productive area.

Paras. 13-15 do not apply to impacts covered under para. 3(b) of this policy. The eligibility criteria for displaced persons under 3 (b) are covered under the process framework (see paras. 7 and 30).

Such claims could be derived from adverse possession, from continued possession of public lands without government action for eviction (that is, with the implicit leave of the government), or from customary and traditional law and usage, and so on.

Resettlement assistance may consist of land, other assets, cash, employment, and so on, as appropriate.

Normally, this cut-off date is the date the census begins. The cut-off date could also be the date the project area was delineated, prior to the census, provided that there has been an effective public dissemination of information on the area delineated, and systematic and continuous dissemination subsequent to the delineation to prevent

further population influx.

For projects that are highly risky or contentious, or that involve significant and complex resettlement activities, the borrower should normally engage an advisory panel of independent, internationally recognized resettlement specialists to advise on all aspects of the project relevant to the resettlement activities. The size, role, and frequency of meeting depend on the complexity of the resettlement. If independent technical advisory panels are established under [OP 4.01](#), *Environmental Assessment*, the resettlement panel may form part of the environmental panel of experts.

See [The World Bank Policy on Disclosure of Information, para. 34](#) (Washington, D.C.: World Bank, 2002).

An exception to this requirement may be made in highly unusual circumstances (such as emergency operations) with the approval of Bank Management (see [BP 4.12, para. 8](#)). In such cases, the Management's approval stipulates a timetable and budget for developing the resettlement plan.

Impacts are considered "minor" if the affected people are not physically displaced and less than 10 percent of their productive assets are lost.

For the purpose of this paragraph, the term "subprojects" includes components and subcomponents.

OP 4.12, Annex A - Involuntary Resettlement Instruments

These policies were prepared for use by World Bank staff OP 4.12 - Annex A and are not necessarily a complete treatment of the subject. December, 2001

Revised February 2011

This Operational Policy statement was updated in February 2011 to clarify the use of Use of Escrow Accounts in order to Help Reduce Delays in Implementation of Resettlement, and Clarification of Funding of Grievance Mechanisms. Questions on this policy may be addressed to [OPCS Quality Assurance and Compliance \(OPCQC\)](#).

1. This annex describes the elements of a resettlement plan, an abbreviated resettlement plan, a resettlement policy framework, and a resettlement process framework, as discussed in [OP 4.12, paras. 17-31](#).

Resettlement Plan

2. The scope and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. The plan is based on up-to-date and reliable information about (a) the proposed resettlement and its impacts on the displaced persons and other adversely affected groups, and (b) the legal issues involved in resettlement. The resettlement plan covers the elements below, as relevant. When any element is not

relevant to project circumstances, it should be noted in the resettlement plan.

3. *Description of the project.* General description of the project and identification of the project area.

4. *Potential impacts.* Identification of

- (a) the project component or activities that give rise to resettlement;
- (b) the zone of impact of such component or activities;
- (c) the alternatives considered to avoid or minimize resettlement; and
- (d) the mechanisms established to minimize resettlement, to the extent possible, during project implementation.

5. *Objectives.* The main objectives of the resettlement program.

6. *Socioeconomic studies.* The findings of socioeconomic studies to be conducted in the early stages of project preparation and with the involvement of potentially displaced people, including

- (a) the results of a census survey covering
 - (i) current occupants of the affected area to establish a basis for the design of the resettlement program and to exclude subsequent inflows of people from eligibility for compensation and resettlement assistance;
 - (ii) standard characteristics of displaced households, including a description of production systems, labor, and household organization; and baseline information on livelihoods (including, as relevant, production levels and income derived from both formal and informal economic activities) and standards of living (including health status) of the displaced population;
 - (iii) the magnitude of the expected loss--total or partial--of assets, and the extent of displacement, physical or economic;
 - (iv) information on vulnerable groups or persons as provided for in [OP 4.12, para. 8](#), for whom special provisions may have to be made; and
 - (v) provisions to update information on the displaced people's livelihoods and standards of living at regular intervals so that the latest information is available at the time of their displacement.
- (b) Other studies describing the following

(i) land tenure and transfer systems, including an inventory of common property natural resources from which people derive their livelihoods and sustenance, non-title-based usufruct systems (including fishing, grazing, or use of forest areas) governed by local recognized land allocation mechanisms, and any issues raised by different tenure systems in the project area;

(ii) the patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project;

(iii) public infrastructure and social services that will be affected; and

(iv) social and cultural characteristics of displaced communities, including a description of formal and informal institutions (e.g., community organizations, ritual groups, nongovernmental organizations (NGOs)) that may be relevant to the consultation strategy and to designing and implementing the resettlement activities.

7. Legal framework. The findings of an analysis of the legal framework, covering

(a) the scope of the power of eminent domain and the nature of compensation associated with it, in terms of both the valuation methodology and the timing of payment;

(b) the applicable legal and administrative procedures, including a description of the remedies available to displaced persons in the judicial process and the normal timeframe for such procedures, and any available alternative dispute resolution mechanisms that may be relevant to resettlement under the project;

(c) relevant law (including customary and traditional law) governing land tenure, valuation of assets and losses, compensation, and natural resource usage rights; customary personal law related to displacement; and environmental laws and social welfare legislation;

(d) laws and regulations relating to the agencies responsible for implementing resettlement activities;

(e) gaps, if any, between local laws covering eminent domain and resettlement and the Bank's resettlement policy, and the mechanisms to bridge such gaps; and

(f) any legal steps necessary to ensure the effective implementation of resettlement activities under the project, including, as appropriate, a process for recognizing claims to legal rights to land--including claims that derive from customary law and traditional usage (see [OP 4.12, para.15 b](#)).

8. Institutional Framework. The findings of an analysis of the institutional framework covering

(a) the identification of agencies responsible for resettlement activities and NGOs that

may have a role in project implementation;

(b) an assessment of the institutional capacity of such agencies and NGOs; and

(c) any steps that are proposed to enhance the institutional capacity of agencies and NGOs responsible for resettlement implementation.

9. *Eligibility.* Definition of displaced persons and criteria for determining their eligibility for compensation and other resettlement assistance, including relevant cut-off dates.

10. *Valuation of and compensation for losses.* The methodology to be used in valuing losses to determine their replacement cost; and a description of the proposed types and levels of compensation under local law and such supplementary measures as are necessary to achieve replacement cost for lost assets.¹

11. *Resettlement measures.* A description of the packages of compensation and other resettlement measures that will assist each category of eligible displaced persons to achieve the objectives of the policy (see [OP 4.12, para. 6](#)). In addition to being technically and economically feasible, the resettlement packages should be compatible with the cultural preferences of the displaced persons, and prepared in consultation with them.

12. *Site selection, site preparation, and relocation.* Alternative relocation sites considered and explanation of those selected, covering

(a) institutional and technical arrangements for identifying and preparing relocation sites, whether rural or urban, for which a combination of productive potential, locational advantages, and other factors is at least comparable to the advantages of the old sites, with an estimate of the time needed to acquire and transfer land and ancillary resources;

(b) any measures necessary to prevent land speculation or influx of ineligible persons at the selected sites;

(c) procedures for physical relocation under the project, including timetables for site preparation and transfer; and

(d) legal arrangements for regularizing tenure and transferring titles to resettlers.

13. *Housing, infrastructure, and social services.* Plans to provide (or to finance resettlers' provision of) housing, infrastructure (e.g., water supply, feeder roads), and social services (e.g., schools, health services);² plans to ensure comparable services to host populations; any necessary site development, engineering, and architectural designs for these facilities.

14. *Environmental protection and management.* A description of the boundaries of the

relocation area; and an assessment of the environmental impacts of the proposed resettlement³ and measures to mitigate and manage these impacts (coordinated as appropriate with the environmental assessment of the main investment requiring the resettlement).

15. *Community participation.* Involvement of resettlers and host communities,⁴

(a) a description of the strategy for consultation with and participation of resettlers and hosts in the design and implementation of the resettlement activities;

(b) a summary of the views expressed and how these views were taken into account in preparing the resettlement plan;

(c) a review of the resettlement alternatives presented and the choices made by displaced persons regarding options available to them, including choices related to forms of compensation and resettlement assistance, to relocating as individuals families or as parts of preexisting communities or kinship groups, to sustaining existing patterns of group organization, and to retaining access to cultural property (e.g. places of worship, pilgrimage centers, cemeteries);⁵ and

(d) institutionalized arrangements by which displaced people can communicate their concerns to project authorities throughout planning and implementation, and measures to ensure that such vulnerable groups as indigenous people, ethnic minorities, the landless, and women are adequately represented.

16. *Integration with host populations.* Measures to mitigate the impact of resettlement on any host communities, including

(a) consultations with host communities and local governments;

(b) arrangements for prompt tendering of any payment due the hosts for land or other assets provided to resettlers;

(c) arrangements for addressing any conflict that may arise between resettlers and host communities; and

(d) any measures necessary to augment services (e.g., education, water, health, and production services) in host communities to make them at least comparable to services available to resettlers.

17. *Grievance procedures.* Affordable and accessible procedures for third-party settlement of disputes arising from resettlement; such grievance mechanisms should take into account the availability of judicial recourse and community and traditional dispute settlement mechanisms.

18. *Organizational responsibilities.* The organizational framework for implementing

resettlement, including identification of agencies responsible for delivery of resettlement measures and provision of services; arrangements to ensure appropriate coordination between agencies and jurisdictions involved in implementation; and any measures (including technical assistance) needed to strengthen the implementing agencies' capacity to design and carry out resettlement activities; provisions for the transfer to local authorities or resettlers themselves of responsibility for managing facilities and services provided under the project and for transferring other such responsibilities from the resettlement implementing agencies, when appropriate.

19. *Implementation schedule.* An implementation schedule covering all resettlement activities from preparation through implementation, including target dates for the achievement of expected benefits to resettlers and hosts and terminating the various forms of assistance. The schedule should indicate how the resettlement activities are linked to the implementation of the overall project.

20. *Costs and budget.* Tables showing itemized cost estimates for all resettlement activities, including allowances for inflation, population growth, and other contingencies; timetables for expenditures; sources of funds; and arrangements for timely flow of funds, and funding for resettlement, if any, in areas outside the jurisdiction of the implementing agencies.⁶

21. *Monitoring and evaluation.* Arrangements for monitoring of resettlement activities by the implementing agency, supplemented by independent monitors as considered appropriate by the Bank, to ensure complete and objective information; performance monitoring indicators to measure inputs, outputs, and outcomes for resettlement activities; involvement of the displaced persons in the monitoring process; evaluation of the impact of resettlement for a reasonable period after all resettlement and related development activities have been completed; using the results of resettlement monitoring to guide subsequent implementation.

Abbreviated Resettlement Plan

22. An abbreviated plan covers the following minimum elements:⁷

- (a) a census survey of displaced persons and valuation of assets;
- (b) description of compensation and other resettlement assistance to be provided;
- (c) consultations with displaced people about acceptable alternatives;
- (d) institutional responsibility for implementation and procedures for grievance redress;
- (e) arrangements for monitoring and implementation; and

(f) a timetable and budget.

Resettlement Policy Framework

23. The purpose of the policy framework is to clarify resettlement principles, organizational arrangements, and design criteria to be applied to subprojects to be prepared during project implementation (see [OP 4.12, paras. 26-28](#)). Subproject resettlement plans consistent with the policy framework subsequently are submitted to the Bank for approval after specific planning information becomes available (see [OP 4.12, para. 29](#)).

24. The resettlement policy framework covers the following elements, consistent with the provisions described in [OP 4.12, paras. 2 and 4](#):

(a) a brief description of the project and components for which land acquisition and resettlement are required, and an explanation of why a resettlement plan as described in paras. 2-21 or an abbreviated plan as described in para. 22 cannot be prepared by project appraisal;

(b) principles and objectives governing resettlement preparation and implementation;

(c) a description of the process for preparing and approving resettlement plans;

(d) estimated population displacement and likely categories of displaced persons, to the extent feasible;

(e) eligibility criteria for defining various categories of displaced persons;

(f) a legal framework reviewing the fit between borrower laws and regulations and Bank policy requirements and measures proposed to bridge any gaps between them;

(g) methods of valuing affected assets;

(h) organizational procedures for delivery of entitlements, including, for projects involving private sector intermediaries, the responsibilities of the financial intermediary, the government, and the private developer;

(i) a description of the implementation process, linking resettlement implementation to civil works;

(j) a description of grievance redress mechanisms;

(k) a description of the arrangements for funding resettlement, including the preparation and review of cost estimates, the flow of funds, and contingency arrangements;

(l) a description of mechanisms for consultations with, and participation of, displaced persons in planning, implementation, and monitoring; and

(m) arrangements for monitoring by the implementing agency and, if required, by independent monitors.

25. When a resettlement policy framework is the only document that needs to be submitted as a condition of the loan, the resettlement plan to be submitted as a condition of subproject financing need not include the policy principles, entitlements, and eligibility criteria, organizational arrangements, arrangements for monitoring and evaluation, the framework for participation, and mechanisms for grievance redress set forth in the resettlement policy framework. The subproject-specific resettlement plan needs to include baseline census and socioeconomic survey information; specific compensation rates and standards; policy entitlements related to any additional impacts identified through the census or survey; description of resettlement sites and programs for improvement or restoration of livelihoods and standards of living; implementation schedule for resettlement activities; and detailed cost estimate.

Process Framework

26. A process framework is prepared when Bank-supported projects may cause restrictions in access to natural resources in legally designated parks and protected areas. The purpose of the process framework is to establish a process by which members of potentially affected communities participate in design of project components, determination of measures necessary to achieve resettlement policy objectives, and implementation and monitoring of relevant project activities (see [OP 4.12, paras. 7 and 31](#)).

27. Specifically, the process framework describes participatory processes by which the following activities will be accomplished

(a) *Project components will be prepared and implemented.* The document should briefly describe the project and components or activities that may involve new or more stringent restrictions on natural resource use. It should also describe the process by which potentially displaced persons participate in project design.

(b) *Criteria for eligibility of affected persons will be determined.* The document should establish that potentially affected communities will be involved in identifying any adverse impacts, assessing of the significance of impacts, and establishing of the criteria for eligibility for any mitigating or compensating measures necessary.

(c) *Measures to assist affected persons in their efforts to improve their livelihoods or restore them, in real terms, to pre-displacement levels, while maintaining the sustainability of the park or protected area will be identified.* The document should describe methods and procedures by which communities will identify and choose

potential mitigating or compensating measures to be provided to those adversely affected, and procedures by which adversely affected community members will decide among the options available to them.

(d) *Potential conflicts or grievances within or between affected communities will be resolved.* The document should describe the process for resolving disputes relating to resource use restrictions that may arise between or among affected communities, and grievances that may arise from members of communities who are dissatisfied with the eligibility criteria, community planning measures, or actual implementation.

Additionally, the process framework should describe arrangements relating to the following

(e) *Administrative and legal procedures.* The document should review agreements reached regarding the process approach with relevant administrative jurisdictions and line ministries (including clear delineation for administrative and financial responsibilities under the project).

(f) *Monitoring arrangements.* The document should review arrangements for participatory monitoring of project activities as they relate to (beneficial and adverse) impacts on persons within the project impact area, and for monitoring the effectiveness of measures taken to improve (or at minimum restore) incomes and living standards.

With regard to land and structures, "replacement cost" is defined as follows: For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset. Where domestic law does not meet the standard of compensation at full replacement cost, compensation under domestic law is supplemented by additional measures so as to meet the replacement cost standard. Such additional assistance is distinct from resettlement measures to be provided under other clauses in [OP 4.12, para. 6](#).

Provision of health care services, particularly for pregnant women, infants, and

the elderly, may be important during and after relocation to prevent increases in morbidity and mortality due to malnutrition, the psychological stress of being uprooted, and the increased risk of disease.

Negative impacts that should be anticipated and mitigated include, for rural resettlement, deforestation, overgrazing, soil erosion, sanitation, and pollution; for urban resettlement, projects should address such density-related issues as transportation capacity and access to potable water, sanitation systems, and health facilities.

Experience has shown that local NGOs often provide valuable assistance and ensure viable community participation.

[OP 4.11](#), *Physical Cultural Resources*.

The costs of establishing the grievance procedures for the project shall be included in the project costs.

In case some of the displaced persons lose more than 10% of their productive assets or require physical relocation, the plan also covers a socioeconomic survey and income restoration measures.

UTTAR PRADESH

LAND ACQUISITION (DETERMINATION OF COMPENSATION AND DECLARATION OF AWARD BY AGREEMENT) RULES, 1997

In exercise of the powers conferred by the sub-section(1) of Section 55 of the Land Acquisition Act, 1894 (Act 1 of 1894), the Governor is pleased to make the following Rules:

1. **Short title, extent and commencement** - (1) These rules may be called the Uttar Pradesh Land Acquisition (Determination of Compensation and Declaration of Award by Agreement) Rules, 1997.
 2. They shall extend to the whole of the Uttar Pradesh.
 3. They shall come into force with effect from the date of their publication in the Gazette.
2. The body or Department for which the land is being acquired may, at any stage of the proceedings settle down the terms and conditions and rates of the land under acquisition, with the land owners and appear before the Collectors and make an application indicating the terms and conditions so settled down and its readiness and willingness for determination of compensation and declaration of award in accordance with agreement. The Collector shall, if satisfied, issue notice to the persons interested in the land under acquisition to express their readiness and willingness to execute the agreement in writing, on the matters to be included in the award.
3. The Collector may, after hearing the parties, and upon being satisfied that the persons interested in the land are ready and willing to execute the agreement, grant the permission unless, for reasons to be recorded in writing he decides to refuse it.
4. (1) The Collector shall, where he grants the permission inform the persons interested in the land by registered post, about date, time and place for the execution of the agreement.
- (2) The agreement shall be executed in the form appended to these rules, with necessary details as to whether possession has, or has not, been taken before the award.
- (3) If the persons so informed fail to turn up and execute the agreement on such date, time and place or the extended date, as the case may be, the Collector shall proceed to make enquiry under Section-11 from the stage, at which the application under Rule 2 was made.

5. The amount of compensation to be settled in the agreement shall, always abide by the instructions issued by the State Government of Uttar Pradesh from time to time.

6. (1) When an agreement is discovered to have been fraudulently executed, the Collector shall, *suo motu*, or on an application made in that behalf, cancel the agreement after affording a reasonable opportunity of being heard to the persons who have executed the agreement.

(2) In case of cancellation of the agreement under sub-rule (1) of the executants shall have no right to claim any compensation or damages from the State Government.

FORM OF AGREEMENT

[See Rule 4(2)]

Agreement to be executed when land is acquired for public purposes by agreement between the persons interested and the acquiring body.

This agreement made this day of corresponding to saka samvat the day of 20..... between (1).....(2).....etc. hereinafter called the owner/owners (which expression shall unless repugnant to the context or meaning thereof excludes his/their heirs, executors and administrators) and (1) (2) etc. hereinafter called the interested party/ parties, which expression shall unless repugnant to the context or meaning thereof includes his/their successors and assignees (to be scored out if there is no interested party) of the one part and the Governor of Uttar Pradesh acting through hereinafter called the 'Government' of the other part;

And whereas the right, title and interest of the owner/owners and the interested party/ parties in the following land/lands hereinafter called the said land/ lands, is/are as specified below:

(a) Owner/ owners being the absolute owner/owners of the property or having an interest therein capable of leading to ownership ultimately, hereinafter mentioned and hereby conveyed in the following shares, that is to say:

(1) S/o share
(2) S/o share
(3) S/o share

(b) Where the land/lands are held by the interested party/parties under the owners named hereinabove with respective terms and nature of interest:

- (1) S/o Definite term and nature of interest
(2) S/o Definite term and nature of interest
(3) S/o Definite term and nature of interest

.....
(to be scored out if there is no interested party/parties);

And whereas the said land/lands have been notified for acquisition under Section 4 of the Land Acquisition act, 1894 under Notification No..... dated..... published on and under Section 6 of the said Act under Notification No..... dated published on.....

And whereas the said land/lands have been notified for acquisition under Section 4 of the Land Acquisition Act, 1894 under Notification No..... Dated..... published on and under Section 6 of the said Act under Notification No. dated..... published on.....

And whereas the owner/owners and/or the interested party/ parties agrees/ agree to refer the matter to the reference of the Collector and to accept the award to be made thereon as compensation payable under Section 23 of the Land Acquisition Act, 1894 including additional amount @ 12% under sub-section (1-A), solatium @ 30% under sub-section (2) thereof for the said land/lands and also agrees/ agree to apportion the same between themselves as stated in detail at the end;

And whereas the owner/owners and/or the interested party/ parties further agrees/ agree to the deduction of the total amount shown in the award, in case any or all of the said thing/ things attached to the earth or permanently fastened to anything attached to earth is withdrawn with the prior approval of the Land Acquisition Officer.....;

And whereas the owner/ owners and the interested party/ parties further agrees/ agree to the deduction of the amount to be mentioned in the said award in case they are allowed to harvest the standing crop thereon by the Land Acquisition Officer.....
.....;

Now, therefore, the owner/ owners and/or interested party/parties does/do hereby agrees/agree with the Government as follows:

- (1) that the Land Acquisition Officer shall be competent to declare the award as per term of this agreement without any further enquiry which is required to be held under the provisions of the Land Acquisition Act, 1894;

- (2) if the Government deems it necessary to take immediate possession of the land under acquisition even though there is a standing crop on it the Government will be entitled to do so provided that compensation for the standing crop as shown in as per the award is paid;
- (3) that the owner/owners and interested party/parties shall not claim any amount in addition to the amount agreed upon as aforesaid as compensation and accept it without any protest;
- (4) if hereafter or after the payment of compensation as per the award it transpires that the owner/owners and/or the interested party/parties is/are not entitled at all or is/are not exclusively entitled to the entire amount of compensation awarded by the Land Acquisition Officer in term of this agreement in respect of the said land/lands as mentioned at the end, and the Government is required to pay any compensation to any other person, the owner/owners and the interested party/parties shall on demand refund to the Government the entire amount of money received by him/them or such amount as may be determined by the Land Acquisition Officer as refundable by him/them to the Government and shall also indemnify (jointly and severally) the Government against any claim or compensation or part thereof by any other person/persons and against all proceedings and liabilities of any loss or damage suffered or any costs, charges or expenses incurred by Government by reason of the payment to him/them and the owner/owners and the interested party/parties shall pay the interest at the rate of 9% on the amount so refundable for the first year and at the rate of 15% for the subsequent years;
- (5) if the owner/owners and/or interested party/parties fails/fail to refund to the Government the amount mentioned in the preceding para, the Government shall have the full right to recover the same as arrears to land revenue or order to proceed under any law in force for recovery of such amount;
- (6) without prejudice to any other remedy for the enforcement of any refund or indemnity, the Government may recover any sum determined and certified by the Land Acquisition Officer to be due and payable by the owner/owners and interested party/parties to the Government by way of refund or otherwise under these presents as arrear of land revenue;
- (7) if any Government dues/shares/premium from this land/lands are payable by the owner/owners or interested party/parties and the loans of any public financial institutions are outstanding against the land/lands the same shall be deducted from the said compensation amount that may be awardable under these presents;
- (8) The Government shall bear the stamp duty payable in respect of this agreement.

Village.....
Pargana/Tehsil.....
District.....

Survey No.	Area	Details of lands if it is part of the survey number showing four boundaries and ownership of adjoining landholders	Compensation for land comprised in col. (1+2+3)	Crop standing thereon	
				Details	Amount of Compensation
1	2	3	4	5	6

Details of other things attached to the earth		Total Compensation payable (4+6+8)	Name and address of the person(s) whom payable and extent thereof
Details	Amount of Compensation		
7	8	9	10

Signed by the owner/owners of the land and/or the interested party/parties and the acquiring authority on behalf of the Governor.

Land owners/interested parties

1.....
2.....
3.....

Government

Full Name
Designation
Witness
1.....
2.....
3.....

MINISTRY OF RURAL DEVELOPMENT

(Department of Land Resources)

(Land Reforms Division)

RESOLUTION

New Delhi, the 31st October, 2007

Subject : National Rehabilitation and Resettlement Policy, 2007

FNo. 26011/4/2007-LRD.—Whereas, the Government of India, Ministry of Rural Development, Department of Land Resources, have formulated a National Rehabilitation and Resettlement Policy, 2007;

And, whereas, the Government of India desire that the contents of the said Policy be brought to the notice of the general public and given wide publicity;

Now, therefore, it is directed that the National Rehabilitation and Resettlement Policy, 2007 given in the Schedule hereto annexed be published in the Gazette of India, Extraordinary, Part I, Section I, dated the 31st October, 2007.

SCHEDULE

THE NATIONAL REHABILITATION AND RESETTLEMENT
POLICY, 2007CHAPTER - I

1. Policy

PREAMBLE:

1.1 Provision of public facilities or infrastructure often requires the exercise of legal powers by the state under the principle of *eminent domain* for acquisition of private property, leading to involuntary displacement of people, depriving them of their land, livelihood and shelter; restricting their access to traditional resource base, and uprooting them from their socio-cultural environment. These have traumatic, psychological and socio-cultural consequences on the affected population which call for protecting their rights, in particular of the weaker sections of the society including members of the Scheduled Castes, Scheduled Tribes, marginal farmers and women. Involuntary displacement of people may be caused by other factors also.

1.2 There is imperative need to recognise rehabilitation and resettlement issues as intrinsic to the development process formulated with the active participation of the affected persons, rather than as externally-imposed requirements. Additional benefits beyond monetary compensation have to be provided to the families affected adversely by involuntary displacement. The plight of those who do not have legal or recognised rights over the land on which they are critically dependent for their

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subsistence is even worse. This calls for a broader concerted effort on the part of the planners to include in the displacement, rehabilitation and resettlement process framework not only those who directly lose land and other assets but also those who are affected by such acquisition of assets. The displacement process often poses problems that make it difficult for the affected persons to continue their earlier livelihood activities after resettlement. This requires a careful assessment of the economic disadvantages and social impact of displacement. There must also be a holistic effort aimed at improving the all round living standards of the affected people.

1.3 A National Policy on Resettlement and Rehabilitation for Project Affected Families was formulated in 2003, and it came into force w.e.f. February, 2004. Experience of implementation of this policy indicates that there are many issues addressed by the policy which need to be reviewed. There should be a clear perception, through a careful quantification of the costs and benefits that will accrue to society at large, of the desirability and justifiability of each project. The adverse impact on affected families – economic, environmental, social and cultural – needs to be assessed in a participatory and transparent manner. A national policy must apply to all projects where involuntary displacement takes place.

1.4 The aim should be to minimise large-scale displacement, as far as possible. Only the minimum area of land commensurate with the purpose of the project may be acquired. Also, as far as possible, projects may be set up on wasteland, degraded land or un-irrigated land. Acquisition of agricultural land for non-agricultural use in the project may be kept to the minimum; multi-cropped land may be avoided to the extent possible for such purposes, and acquisition of irrigated land, if unavoidable, may be kept to the minimum. Prior to initiating the acquisition of land for a project, the appropriate Government should, *inter alia*, take into consideration the alternatives that will (i) minimise the displacement of people due to the acquisition of land for the project; (ii) minimise the total area of land to be acquired for the project; and (iii) minimise the acquisition of agricultural land for non-agricultural use in the project. The options assessment may be in terms of the alternative project plans, potentially suitable sites, technological choices available, or a combination of these. Suitable institutional mechanism should be developed and adopted by the appropriate Government for carrying out the task in a transparent manner.

1.5 Where large numbers of families are affected, it must be mandatory to do social impact assessments and provide all required infrastructural facilities and amenities in the resettlement area. More particularly, where the Scheduled Tribes people are being displaced in sizeable numbers, a well thought out Tribal Development Plan must be put in place.

1.6 Furthermore, such a policy must specify clear timeframes within which the implementation of the rehabilitation package as well as utilization of the land shall

be accomplished. Also, it should lay down an effective monitoring and grievance redressal mechanism.

1.7 It is acknowledged that many State Governments, Public Sector Undertakings or agencies, and other requiring bodies either have their own Rehabilitation and Resettlement (R&R) policies or are in the process of formulating them. The provisions of the National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007) provide for the basic minimum requirements, and all projects leading to involuntary displacement of people must address the rehabilitation and resettlement issues comprehensively. The State Governments, Public Sector Undertakings or agencies, and other requiring bodies shall be at liberty to put in place greater benefit levels than those prescribed in the NRRP-2007. The principles of this policy may also apply to the rehabilitation and resettlement of persons involuntarily displaced permanently due to any other reason.

CHAPTER – II

2. Objectives of the National Rehabilitation and Resettlement Policy

2.1 The objectives of the National Rehabilitation and Resettlement Policy^a are as follows:-

- (a) to minimise displacement and to promote, as far as possible, non-displacing or least-displacing alternatives;
- (b) to ensure adequate rehabilitation package and expeditious implementation of the rehabilitation process with the active participation of the affected families;
- (c) to ensure that special care is taken for protecting the rights of the weaker sections of society, especially members of the Scheduled Castes and Scheduled Tribes, and to create obligations on the State for their treatment with concern and sensitivity;
- (d) to provide a better standard of living, making concerted efforts for providing sustainable income to the affected families;
- (e) to integrate rehabilitation concerns into the development planning and implementation process; and
- (f) where displacement is on account of land acquisition, to facilitate harmonious relationship between the requiring body and affected families through mutual cooperation.

CHAPTER – III

3. Definitions

3.1 The definition of various expressions used in this policy are as follows:

- (a) "*Administrator for Rehabilitation and Resettlement*" means an officer not below the rank of District Collector in a State appointed for the purpose of rehabilitation and resettlement of affected persons;

(b) "*affected family*" means:

- (i) a family whose primary place of residence or other property or source of livelihood is adversely affected by the acquisition of land for a project or involuntary displacement for any other reason; or
- (ii) any tenure holder, tenant, lessee or owner of other property, who on account of acquisition of land (including plot in the *abadi* or other property) in the affected area or otherwise, has been involuntarily displaced from such land or other property; or
- (iii) any agricultural or non-agricultural labourer, landless person (not having homestead land, agricultural land, or either homestead or agricultural land), rural artisan, small trader or self-employed person; who has been residing or engaged in any trade, business, occupation or vocation continuously for a period of not less than three years preceding the date of declaration of the affected area, and who has been deprived of earning his livelihood or alienated wholly or substantially from the main source of his trade, business, occupation or vocation because of the acquisition of land in the affected area or being involuntarily displaced for any other reason;

(c) "*affected area*" means area of village or locality notified by the appropriate Government under paragraph 6.1 of this policy;

(d) "*agricultural labourer*" means a person primarily resident in the affected area for a period of not less than three years immediately before the declaration of the affected area who does not hold any land in the affected area but who earns his livelihood principally by manual labour on agricultural land therein immediately before such declaration and who has been deprived of his livelihood;

(e) "*agricultural land*" includes lands being used for the purpose of-

- (i) agriculture or horticulture;
- (ii) dairy farming, poultry farming, pisciculture, breeding of livestock or nursery growing medicinal herbs;
- (iii) raising of crops, grass or garden produce; and
- (iv) land used by an agriculturist for the grazing of cattle, but does not include land used for cutting of wood only;

(f) "*appropriate Government*" means,-

- (i) in relation to the acquisition of land for the purposes of the Union, the Central Government;
- (ii) in relation to a project which is executed by the Central Government agency or undertaking or by any other agency on the orders or directions

of the Central Government, the Central Government;

(iii) in relation to the acquisition of land for purposes other than (i) and (ii) above, the State Government; and

(iv) in relation to the rehabilitation and resettlement of persons involuntarily displaced due to any other reason, the State Government;

(g) 'BPL family': The below poverty line (BPL) families shall be those as defined by the Planning Commission of India from time to time and included in a BPL list for the time being in force;

(h) "Commissioner for Rehabilitation and Resettlement" means the Commissioner for Rehabilitation and Resettlement appointed by the State Government not below the rank of Commissioner or of equivalent rank of that Government;

(i) "DDP block" means a block identified under the Desert Development Programme of the Government of India;

(j) "family" includes a person, his or her spouse, minor sons, unmarried daughters, minor brothers, unmarried sisters, father, mother and other relatives residing with him or her and dependent on him or her for their livelihood; and includes "nuclear family" consisting of a person, his or her spouse and minor children;

(k) "holding" means the total land held by a person as an occupant or tenant or as both;

(l) "khatedar" means a person whose name is included in the revenue records of the parcel of land under reference;

(m) "land acquisition" or "acquisition of land" means acquisition of land under the Land Acquisition Act, 1894 (1 of 1894), as amended from time to time, or any other law of the Union or a State for the time being in force;

(n) "marginal farmer" means a cultivator with an un-irrigated land holding up to one hectare or irrigated land holding up to half hectare;

(o) "non-agricultural labourer" means a person who is not an agricultural labourer but is primarily residing in the affected area for a period of not less than three years immediately before the declaration of the affected area and who does not hold any land under the affected area but who earns his livelihood principally by manual labour or as a rural artisan immediately before such declaration and who has been deprived of earning his livelihood principally by manual labour or as such artisan in the affected area;

(p) "notification" means a notification published in the Gazette of India or, as the case may be the Gazette of a State;

(q) "occupiers" means members of the Scheduled Tribes in possession of forest land prior to the 13th day of December, 2005;

- (r) "Ombudsman" means the person appointed under paragraph 8.3 of this policy for redressal of grievances;
- (s) "prescribed" means, unless otherwise specified, prescribed by guidelines or orders issued by the Central Government under this policy;
- (t) "project" means a project involving involuntary displacement of people, irrespective of the number of persons affected;
- (u) "requiring body" means a company, a body corporate, an institution, or any other organisation for whom land is to be acquired by the appropriate Government, and includes the appropriate Government if the acquisition of land is for such Government either for its own use or for subsequent transfer of such land in public interest to a company, a body corporate, an institution, or any other organization, as the case may be, under lease, license or through any other system of transfer of land;
- (v) "resettlement area" means any area so declared under paragraph 6.9 of this policy by the appropriate Government;
- (w) "small farmer" means a cultivator with an un-irrigated land holding up to two hectares or with an irrigated land holding up to one hectare, but more than the holding of a marginal farmer.

CHAPTER - IV

4. Social Impact Assessment (SIA) of Projects

4.1 Whenever it is desired to undertake a new project or expansion of an existing project, which involves involuntary displacement of four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, the appropriate Government shall ensure that a Social Impact Assessment (SIA) study is carried out in the proposed affected areas in such manner as may be prescribed.

4.2.1 The above SIA report shall be prepared, in such proforma as may be prescribed, considering various alternatives, and using agencies accredited in the manner prescribed.

4.2.2 While undertaking a social impact assessment, the appropriate Government shall, *inter alia*, take into consideration the impact that the project will have on public and community properties, assets and infrastructure; particularly, roads, public transport, drainage, sanitation, sources of safe

drinking water, sources of drinking water for cattle, community ponds, grazing land, plantations; public utilities, such as post offices, fair price shops, etc.; food storage godowns, electricity supply, health care facilities, schools and educational/training facilities, places of worship, land for traditional tribal institutions, burial and cremation grounds, etc.

4.2.3 The appropriate Government may specify that the ameliorative measures, which will need to be undertaken for addressing the said impact for a component, may not be less than what is provided in a scheme or programme, if any, of the Central Government or a State Government in operation in that area.

4.3.1 Where it is required as per the provisions of any law, rules, regulations or guidelines to undertake environmental impact assessment also, the SIA study shall be carried out simultaneously with the Environmental Impact Assessment (EIA) study.

4.3.2 In cases where both EIA and SIA are required, the public hearing done in the project affected area for EIA shall also cover issues related to SIA. Such public hearing shall be organised by the appropriate Government.

4.3.3 Where there is no requirement for EIA, the SIA report shall be made available to the public through public hearing to be organised by the appropriate Government in the affected area.

4.4.1 The SIA report shall be examined by an independent multi-disciplinary expert group constituted for the purpose by the appropriate Government. Two non-official social science and rehabilitation experts, the Secretary/Secretaries of the department(s) concerned with the welfare of Scheduled Castes and Scheduled Tribes of the appropriate Government or his (their) representative(s), and a representative of the requiring body shall be nominated by the appropriate Government to serve on this expert group.

4.4.2 Where both EIA and SIA are required, a copy of the SIA report shall be made available to the agency prescribed in respect of environmental impact assessment by the Ministry of Environment and Forests, and a copy of the EIA report shall be shared with the expert group mentioned in paragraph 4.4.1.

4.5 The SIA clearance shall be accorded as per the procedure and within the time limits as may be prescribed.

4.6 The SIA clearance shall be mandatory for all projects involving involuntary displacement of four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, and the conditions laid down in the SIA clearance shall be duly followed by all concerned.

4.7 The Ministry of Defence, in respect of projects involving emergency acquisition of minimum area of land in connection with national security, may be exempted from the provisions of this Chapter, with due institutional safeguards, as may be prescribed, for protecting the interests of the affected families and achieving the broad objectives of this policy.

CHAPTER - V

5. Appointment of Administrator and Commissioner for Rehabilitation and Resettlement and their powers and functions

5.1 Where the appropriate Government is satisfied that there is likely to be involuntary displacement of large number of persons due to acquisition of land for any project or due to any other reason, it may; and where the appropriate Government is satisfied that there is likely to be involuntary displacement of four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution due to acquisition of land for any project or due to any other reason, it shall, appoint, by notification, by the State Government(s) concerned, in respect of that project, an officer not below the rank of District Collector of the State Government to be the Administrator for Rehabilitation and Resettlement (R&R):

Provided that if the appropriate Government in respect of the project is the Central Government, such appointment shall be made in consultation with the Central Government:

Provided further that in case of a project involving involuntary displacement of less than four hundred families *en masse* in plain areas, or less than two hundred families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, where the appropriate Government decides not to appoint an Administrator for Rehabilitation and Resettlement, adequate administrative arrangements shall be made by the appropriate Government for the rehabilitation and resettlement of the affected families as per this policy.

5.2 The Administrator for Rehabilitation and Resettlement shall be assisted by such officers and employees as the appropriate Government may provide.

5.3 Subject to the superintendence, directions and control of the appropriate Government and Commissioner for Rehabilitation and Resettlement, the Administrator for Rehabilitation and Resettlement shall take all measures for the rehabilitation and resettlement of the affected families.

5.4 The overall control and superintendence of the formulation, execution and monitoring of the rehabilitation and resettlement plan shall vest in the Administrator for Rehabilitation and Resettlement.

5.5 Subject to any general or special order of the appropriate Government, the Administrator for Rehabilitation and Resettlement shall perform the following functions and duties:

- (i) minimise displacement of people and to identify non-displacing or least-displacing alternatives in consultation with the requiring body;
- (ii) hold consultation with the affected families while preparing a rehabilitation and resettlement scheme or plan;
- (iii) ensure that interests of the adversely affected persons of Scheduled Tribes and weaker sections are protected;
- (iv) prepare a draft scheme or plan of rehabilitation and resettlement as required under Chapter VI of this policy;
- (v) prepare a budget including estimated expenditure of various components of acquisition of land, rehabilitation and resettlement activities or programmes in consultation with representatives of the affected families and the requiring body;
- (vi) arrange adequate land, as far as possible, for rehabilitation and resettlement of the affected families;
- (vii) allot land and sanction the benefits to the affected families;
- (viii) perform such other functions as the appropriate Government may, from time to time, by order in writing, assign.

5.6 The Administrator for Rehabilitation and Resettlement may, by order in writing, delegate such of the administrative powers conferred and duties imposed on him by or under this policy to any officer not below the rank of Tehsildar or equivalent.

5.7 All officers and staff appointed by the appropriate Government under this policy shall be subordinate to the Administrator for Rehabilitation and Resettlement.

5.8 The State Government shall appoint an officer of the rank of Commissioner or of equivalent rank of that Government for rehabilitation and resettlement in respect of such cases to which this policy applies to be called the Commissioner for Rehabilitation and Resettlement.

5.9 For the purposes of this policy, the Administrator for Rehabilitation and Resettlement and other officers and employees appointed for the purposes of rehabilitation and resettlement of the affected families shall be subordinate to the Commissioner for Rehabilitation and Resettlement.

5.10 The Commissioner for Rehabilitation and Resettlement shall be responsible for supervising the formulation of rehabilitation and resettlement plans or schemes and proper implementation of such plans or schemes.

CHAPTER - VI

6. Rehabilitation and Resettlement Plan

The procedure mentioned in this chapter shall be followed for declaration of the affected area, carrying out survey and census of affected persons, assessment of government land available and land to be arranged for rehabilitation and resettlement, declaration of the resettlement area or areas, preparation of the draft rehabilitation and resettlement scheme or plan and its final publication.

6.1 Where the appropriate Government is of the opinion that there is likely to be involuntary displacement of four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution due to acquisition of land for any project or due to any other reason, it shall, declare, by notification in the Official Gazette, area of villages or localities as an affected area.

6.2 Every declaration made under paragraph 6.1 of the policy shall be published in at least three daily newspapers, two of which shall be in the local vernacular, having circulation in villages or areas which are likely to be affected, and also by affixing a copy of the notification on the notice board of the concerned *gram panchayats* or municipalities and other prominent place or places in the affected area and the resettlement area, and/or by any other method as may be prescribed in this regard by the appropriate Government.

6.3 Once the declaration is made under paragraph 6.1 of the policy, the Administrator for Rehabilitation and Resettlement shall undertake a baseline survey and census for identification of the persons and families likely to be affected.

6.4 Every such survey shall contain the following village-wise information of the affected families:-

- (i) members of the family who are permanently residing, engaged in any trade, business, occupation or vocation in the affected area;
- (ii) families who are likely to lose, or have lost, their house, agricultural land, employment or are alienated wholly or substantially from the main source of their trade, business, occupation or vocation;
- (iii) agricultural labourers and non-agricultural labourers;
- (iv) families belonging to the Scheduled Caste or Scheduled Tribe categories;
- (v) vulnerable persons such as the disabled, destitute, orphans, widows, unmarried girls, abandoned women, or persons above fifty years of age; who are not provided or cannot immediately be provided with alternative livelihood, and who are not otherwise covered as part of a family;
- (vi) families that are landless (not having homestead land, agricultural land, or either homestead or agricultural land) and below poverty line, but residing continuously for a period of not less than three years in the affected area preceding the date of declaration of the affected area; and
- (vii) Scheduled Tribes families who are or were having possession of forest lands in the affected area prior to the 13th day of December, 2005.

6.5 Every survey undertaken under paragraph 6.4 shall be completed expeditiously and within a period of ninety days from the date of declaration made under paragraph 6.1.

6.6 On completion of the above survey or on expiry of a period of ninety days, whichever is earlier, the Administrator for Rehabilitation and Resettlement shall, by notification, and also in such other manner so as to reach all persons likely to be affected, publish a draft of the details of the findings of the survey conducted by him and invite objections and suggestions from all persons likely to be affected thereby. This draft shall be made known locally by wide publicity in the affected area.

6.7 On the expiry of thirty days from the date of publication of the draft of the details of survey and after considering the objections and suggestions received by

him in this behalf, the Administrator for Rehabilitation and Resettlement shall submit his recommendations thereon along with the details of the survey to the appropriate Government.

6.8 Within forty-five days from the date of receipt of the details of the survey and recommendations of the Administrator for Rehabilitation and Resettlement, the appropriate Government shall publish the final details of survey in the Official Gazette.

6.9 The appropriate Government shall, by notification, declare any area (or areas) as a resettlement area (or areas) for rehabilitation and resettlement of the affected families.

6.10 The Administrator for Rehabilitation and Resettlement shall ensure that the affected families may be settled, wherever possible, in a group or groups in such resettlement areas. However, it has to be ensured that the affected families may be resettled with the host community on the basis of equality and mutual understanding, consistent with the desire of each group to preserve its own identity and culture.

6.11 For the purposes of paragraph 6.9 above, the Administrator for Resettlement and Rehabilitation shall draw up a list of lands that may be available for rehabilitation and resettlement of the affected families.

6.12 The lands drawn up under paragraph 6.11 shall consist of:-

- (a) land available or acquired for the project and earmarked for this purpose;
- (b) Government wastelands and any other land vesting in the Government available for allotment to the affected families;
- (c) lands that may be available for purchase or acquisition for the purposes of rehabilitation and resettlement scheme or plan; or
- (d) a combination of one or more of the above.

However, the Administrator for Rehabilitation and Resettlement should ensure that such acquisition of land does not lead to another set of physically displaced families.

6.13 The Administrator for Rehabilitation and Resettlement, on behalf of the appropriate Government, may either purchase land from any person through

consent award and may enter into an agreement for this purpose, or approach the State Government concerned for acquisition of land for the purposes of rehabilitation and resettlement scheme or plan, keeping in view the contents of paragraph 6.12(b) above.

6.14.1 After completion of baseline survey and census of the affected families and assessment of the requirement of land for resettlement, as mentioned in paragraphs 6.3 and 6.12, the Administrator for Rehabilitation and Resettlement shall prepare a draft scheme or plan for the rehabilitation and resettlement of the affected families after consultation with the representatives of the affected families including women and the representative of the requiring body.

6.14.2 The draft rehabilitation and resettlement scheme or plan shall contain the following particulars, namely:-

- (a) the extent of land to be acquired for the project and the name(s) of the affected village(s);
- (b) a village-wise list of the affected persons, family-wise, and the extent and nature of land and immovable property owned or held in their possession in the affected area, and the extent and nature of such land and immovable property which they are likely to lose or have lost, indicating the survey numbers thereof;
- (c) a list of agricultural labourers in such area and the names of such persons whose livelihood depends on agricultural activities;
- (d) a list of persons who have lost or are likely to lose their employment or livelihood or who have been or likely to be alienated wholly or substantially from their main sources of trade, business, occupation or vocation consequent to the acquisition of land for the project or involuntary displacement due to any other cause;
- (e) a list of non-agricultural labourers, including artisans;
- (f) a list of affected landless families, including those without homestead land and below poverty line families;
- (g) a list of vulnerable affected persons, as indicated at paragraph 6.4(v);
- (h) a list of occupiers, if any;
- (i) a list of public utilities and government buildings which are affected or likely to be affected;
- (j) details of public and community properties, assets and infrastructure;
- (k) a list of benefits and packages which are to be provided to the affected families;

- (l) details of the extent of land available in the resettlement area for resettling and for allotment of land to the affected families;
- (m) details of the amenities and infrastructural facilities which are to be provided for resettlement;
- (n) the time schedule for shifting and resettling the displaced persons in the resettlement area or areas; and
- (o) such other particulars as the Administrator for Rehabilitation and Resettlement may consider necessary.

6.14.3 The draft scheme or plan may be made known locally by wide publicity in the affected area and the resettlement area (or areas) in such manner as may be prescribed by the appropriate Government.

6.15.1 The draft rehabilitation and resettlement scheme or plan shall also be discussed in *gram sabhas* in rural areas and in public hearings in urban and rural areas where *gram sabhas* don't exist.

6.15.2 The consultation with the *gram sabha* or the *panchayats* at the appropriate level in the Scheduled Areas under Schedule V of the Constitution shall be in accordance with the provisions of the Provisions of the *Panchayats* (Extension to the Scheduled Areas) Act, 1996 (40 of 1996).

6.15.3 In cases of involuntary displacement of two hundred or more Scheduled Tribes families from the Scheduled Areas, the concerned Tribes Advisory Councils may also be consulted.

6.16 While preparing a draft scheme or plan as specified in paragraph 6.14, the Administrator for Rehabilitation and Resettlement shall ensure that the entire estimated cost of the rehabilitation and resettlement scheme or plan forms an integral part of the cost of the project for which the land is being acquired. The entire expenditure on rehabilitation and resettlement benefits and other expenditure for rehabilitation and resettlement of the affected families are to be borne by the requiring body for which the land is being acquired. The Administrator for Rehabilitation and Resettlement shall ensure that the entire estimated cost of rehabilitation and resettlement benefits and other expenditure for rehabilitation and resettlement of the affected families is communicated to the requiring body for incorporation in the project cost.

6.17 The Administrator for Rehabilitation and Resettlement shall submit the draft scheme or plan for rehabilitation and resettlement to the appropriate Government

for its approval. In case of a project involving land acquisition on behalf of a requiring body, it shall be the responsibility of the appropriate Government to obtain the consent of the requiring body, to ensure that the necessary approvals as required under this policy have been obtained, and to make sure that the requiring body has agreed to bear the entire cost of rehabilitation and resettlement benefits and other expenditure for rehabilitation and resettlement of the affected families as communicated by the Administrator for Rehabilitation and Resettlement, before approving it.

6.18 After approving the rehabilitation and resettlement scheme or plan, the appropriate Government shall publish the same in the Official Gazette. On final notification of the rehabilitation and resettlement scheme or plan, it shall come into force.

6.19 It shall be the responsibility of the requiring body to provide sufficient funds to the Administrator for Rehabilitation and Resettlement for proper implementation of the rehabilitation and resettlement scheme or plan. As soon as the rehabilitation and resettlement scheme or plan is finalized, the requiring body shall deposit one-third cost of the rehabilitation and resettlement scheme or plan with the Administrator for Rehabilitation and Resettlement.

6.20 The Administrator for Rehabilitation and Resettlement shall keep proper books of accounts and records of the funds placed at his disposal and submit periodic returns to the appropriate Government in this behalf.

6.21 In case of a project involving land acquisition on behalf of a requiring body, an exercise for fast-track updating of land records shall be undertaken concurrently with the land acquisition proceedings. Persons who have acquired any right prior to the date of issue of the notification under sub-section (1) of section 4 of the Land Acquisition Act, 1894 (or such notification under any other Act of the Union or a State for the time being in force under which land acquisition is being undertaken) as per the updated records shall also have right to proportionate compensation along with the original landowners referred to in the said notification.

6.22 In case of a project involving land acquisition on behalf of a requiring body:

- (a) The compensation award shall be declared well in time before displacement of the affected families. Full payment of compensation as well as adequate progress in resettlement shall be ensured in advance of the actual displacement of the affected families.

- (b) The compensation award shall take into account the market value of the property being acquired, including the location-wise minimum price per unit area fixed (or to be fixed) by the respective State Government or UT Administration.
- (c) Conversion to the intended category of use of the land being acquired (for example, from agricultural to non-agricultural) shall be taken into account in advance of the acquisition, and the compensation award shall be determined as per the intended land use category.
- (d) The applicable conversion charges for the change in the land use category shall be paid by the requiring body, and no reduction shall be made in the compensation award on this account.

6.23 In case of a project involving land acquisition on behalf of a requiring body, and if the requiring body is a company authorized to issue shares and debentures, the affected families who are entitled to get compensation for the land or other property acquired, shall be given the option to take up to twenty per cent. of the compensation amount due to them in the form of shares or debentures or both of the requiring body, as per the guidelines to be notified by the Central Government:

Provided that the appropriate Government, at its discretion, may raise this proportion up to fifty per cent. of the compensation amount.

6.24.1 Land compulsorily acquired for a project cannot be transferred to any other purpose except for a public purpose, and after obtaining the prior approval of the appropriate Government.

6.24.2 If land compulsorily acquired for a project or part thereof, remains unutilized for the project for a period of five years from the date of taking over the possession by the requiring body, the same shall revert to the possession and ownership of the appropriate Government without payment of any compensation or remuneration to the requiring body.

6.25 Whenever any land acquired for a public purpose is transferred to an individual or organisation (whether in private sector, public sector or joint sector) for a consideration, eighty per cent. of any net unearned income so accruing to the transferor, shall be shared amongst the persons from whom the lands were acquired or their heirs, in proportion to the value at which the lands were acquired. The fund shall be kept in a separate account which shall be administered in such manner as may be prescribed.

CHAPTER – VII

7. Rehabilitation and Resettlement Benefits for the Affected Families

7.1 The rehabilitation and resettlement benefits shall be extended to all the affected families who are eligible as affected families on the date of publication

of the declaration under paragraph 6.1, and any division of assets in the family after the said date may not be taken into account.

7.2 Any affected family owning house and whose house has been acquired or lost, may be allotted free of cost house site to the extent of actual loss of area of the acquired house but not more than two hundred and fifty square metre of land in rural areas, or one hundred and fifty square metre of land in urban areas, as the case may be, for each nuclear family:

Provided that, in urban areas, a house of up to one hundred square metre carpet area may be provided in lieu thereof. Such a house, if necessary, may be offered in a multi-storied building complex.

7.3 Each affected below poverty line family which is without homestead land and which has been residing in the affected area continuously for a period of not less than three years preceding the date of declaration of the affected area and which has been involuntarily displaced from such area, shall be entitled to a house of minimum one hundred square metre carpet area in rural areas, or fifty square metre carpet area in urban areas (which may be offered, where applicable, in a multi-storied building complex), as the case may be, in the resettlement area:

Provided that any such affected family which opts not to take the house offered, shall get a suitable one-time financial assistance for house construction, and the amount shall not be less than what is given under any programme of house construction by the Government of India.

7.4.1 Each affected family owning agricultural land in the affected area and whose entire land has been acquired or lost, may be allotted in the name of the *khatedar(s)* in the affected family, agricultural land or cultivable wasteland to the extent of actual land loss by the *khatedar(s)* in the affected family subject to a maximum of one hectare of irrigated land or two hectares of un-irrigated land or cultivable wasteland, if Government land is available in the resettlement area. This benefit shall also be available to the affected families who have, as a consequence of the acquisition or loss of land, been reduced to the status of marginal farmers.

7.4.2 In the case of irrigation or hydel projects, the affected families shall be given preference in allotment of land-for-land in the command area of the project, to the extent possible. Such lands may be consolidated, and plots of suitable sizes allotted to the affected families who could be settled there in groups. In case a family cannot be given land in the command area of the project or the family opts not to take land there, such a family may be given monetary compensation on replacement cost basis for their lands lost, for purchase of suitable land elsewhere.

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7.4.3 In the case of irrigation or hydel projects, the State Governments may formulate suitable schemes for providing land to the affected families in the command areas of the projects by way of pooling of the lands that may be available or, otherwise, could be made available in the command areas of such projects.

7.5 (a) In the case of irrigation or hydel projects, fishing rights in the reservoirs shall be given to the affected families, if such rights were enjoyed by them in the affected area; (b) In other cases also, unless there are special reasons, fishing rights shall be given preferentially to the affected families.

7.6 In case of a project involving land acquisition on behalf of a requiring body, the stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the requiring body.

7.7 The land or house allotted to the affected families under this policy shall be free from all encumbrances.

7.8 The land or house allotted to the affected families under this policy may be in the joint names of wife and husband of the affected family.

7.9.1 In case of allotment of wasteland or degraded land in lieu of the acquired land, each *khatedar* in the affected family shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees per hectare for land development.

7.9.2 In case of allotment of agricultural land in lieu of the acquired land, each *khatedar* in the affected family shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for agricultural production.

7.10 Each affected family that is displaced and has cattle, shall get financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed.

7.11 Each affected family that is displaced shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than ten thousand rupees, for shifting of the family, building materials, belongings and cattle.

7.12 Each affected person who is a rural artisan, small trader or self-employed person and who has been displaced shall get a one-time financial assistance of such amount as the appropriate Government may decide but not less than twenty-five thousand rupees, for construction of working shed or shop.

7.13.1 In case of a project involving land acquisition on behalf of a requiring body,-

- (a) the requiring body shall give preference to the affected families – at least one person per nuclear family – in providing employment in the project, subject to the availability of vacancies and suitability of the affected person for the employment;
- (b) wherever necessary, the requiring body shall arrange for training of the affected persons, so as to enable such persons to take on suitable jobs;
- (c) the requiring body shall offer scholarships and other skill development opportunities to the eligible persons from the affected families as per the criteria as may be fixed by the appropriate Government;
- (d) the requiring body shall give preference to the affected persons or their groups or cooperatives in the allotment of outsourced contracts, shops or other economic opportunities coming up in or around the project site; and
- (e) the requiring body shall give preference to willing landless labourers and unemployed affected persons while engaging labour in the project during the construction phase.

7.13.2 The affected persons shall be offered the necessary training facilities for development of entrepreneurship, technical and professional skills for self-employment.

7.14 In case of a project involving land acquisition on behalf of a requiring body, the affected families who have not been provided agricultural land or employment shall be entitled to a rehabilitation grant equivalent to seven hundred fifty days minimum agricultural wages or such other higher amount as may be prescribed by the appropriate Government:

Provided that, if the requiring body is a company authorised to issue shares and debentures, such affected families shall be given the option of taking up to twenty per cent. of their rehabilitation grant amount in the form of shares or debentures of the requiring body, in such manner as may be prescribed:

Provided further that the appropriate Government may, at its discretion, raise this proportion up to fifty per cent. of the rehabilitation grant amount.

7.15 In cases where the acquisition of agricultural land or involuntary displacement takes place on account of land development projects, in lieu of land-for-land or employment, such affected families would be given site(s) or apartment(s) within the development project, in proportion to the land lost, but subject to such limits as may be defined by the appropriate Government.

7.16 In case of a project involving land acquisition on behalf of a requiring body, each affected family which is involuntarily displaced shall get a monthly subsistence allowance equivalent to twenty-five days minimum agricultural wages per month for a period of one year from the date of displacement.

7.17 The project authorities shall, at their cost, arrange for annuity policies that will pay a pension for life to the vulnerable affected persons as indicated at paragraph 6.4(v), of such amount as may be prescribed by the appropriate Government subject to a minimum of five hundred rupees per month.

7.18 If land is acquired in cases of urgency, such as under section 17 of the Land Acquisition Act, 1894 or similar provision of any other Act of the Union or a State for the time being in force, each affected family which is displaced shall be provided with transit and temporary accommodation, pending rehabilitation and resettlement scheme or plan, in addition to the monthly subsistence allowance and other rehabilitation and resettlement benefits due to them under this policy.

7.19 In case of linear acquisitions, in projects relating to railway lines, highways, transmission lines, laying of pipelines and other such projects wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each *khatedar* in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide, but not less than twenty thousand rupees, in addition to the compensation or any other benefits due under the Act or programme or scheme under which the land, house or other property is acquired:

Provided that, if as a result of such land acquisition, the land-holder becomes landless or is reduced to the status of a "small" or "marginal" farmer, other rehabilitation and resettlement benefits available under this policy shall also be extended to such affected family.

7.20 The affected families may be given the option to take a lump-sum amount in lieu of one or more of the benefits specified in paragraphs 7.2 to 7.19, the amount being determined by the appropriate Government after consultation with the requiring body.

7.21 REHABILITATION AND RESETTLEMENT BENEFITS FOR PROJECT AFFECTED FAMILIES BELONGING TO THE SCHEDULED TRIBES AND SCHEDULED CASTES:

7.21.1 In case of a project involving land acquisition on behalf of a requiring body which involves involuntary displacement of two hundred or more Scheduled Tribes families, a Tribal Development Plan shall be prepared, in such form as may be prescribed, laying down the detailed procedure for settling land

rights due but not settled and restoring titles of tribals on alienated land by undertaking a special drive together with land acquisition. The Plan shall also contain a programme for development of alternate fuel, fodder and non-timber forest produce (NTFP) resources on non-forest lands within a period of five years sufficient to meet requirements of tribal communities who are denied access to forests.

7.21.2 The concerned *gram sabha* or the *panchayats* at the appropriate level in the Scheduled Areas under Schedule V of the Constitution or as the case may be, Councils in the Schedule VI Areas shall be consulted in all cases of land acquisition in such areas including land acquisition in cases of urgency, before issue of a notification under the Land Acquisition Act, 1894 or any other Act of the Union or a State for the time being in force under which land acquisition is undertaken, and the consultation shall be in accordance with the provisions of the Provisions of the *Panchayats* (Extension to the Scheduled Areas) Act, 1996 and other relevant laws.

Further, in cases of involuntary displacement of two hundred or more Scheduled Tribes families from the Scheduled Areas, the concerned Tribes Advisory Councils (TACs) may also be consulted.

7.21.3 Each affected family of Scheduled Tribe followed by Scheduled Caste categories shall be given preference in allotment of land-for-land, if Government land is available in the resettlement area.

7.21.4 In case of land being acquired from members of the Scheduled Tribes, at least one-third of the compensation amount due shall be paid to the affected families at the outset as first installment and the rest at the time of taking over the possession of the land.

7.21.5 In case of a project involving land acquisition on behalf of a requiring body, each Scheduled Tribe affected family shall get an additional one-time financial assistance equivalent to five hundred days minimum agricultural wages for loss of customary rights or usages of forest produce.

7.21.6 The Scheduled Tribes affected families will be re-settled, as far as possible, in the same Schedule Area in a compact block, so that they can retain their ethnic, linguistic and cultural identity. Exceptions would be allowed only in rare cases where the requiring body in case of a project involving land acquisition, or the State Government in other cases of involuntary displacement, is unable to offer such land due to reasons beyond its control.

7.21.7 The resettlement areas predominantly inhabited by the Scheduled Tribes shall get land free of cost for community and religious gatherings, to the extent decided by the appropriate Government.

7.21.8 In case of a project involving land acquisition on behalf of a requiring body, the Scheduled Tribes affected families resettled out of the district will get twenty-five per cent, higher rehabilitation and resettlement benefits in monetary terms in respect of the items specified in paragraphs 7.9, 7.10, 7.11, and 7.12.

7.21.9 Any alienation of tribal lands in violation of the laws and regulations for the time being in force shall be treated as null and void. In the case of acquisition of such lands, the rehabilitation and resettlement benefits would be available to the original tribal land-owners.

7.21.10 In the case of irrigation or hydel projects, the affected Scheduled Tribes, other traditional forest dwellers and the Scheduled Castes families having fishing rights in a river or pond or dam in the affected area shall be given fishing rights in the reservoir area of the irrigation or hydel projects.

7.21.11 The Scheduled Tribes and Scheduled Castes affected families enjoying reservation benefits in the affected area shall be entitled to get the reservation benefits at the resettlement area(s).

7.21.12 The affected Scheduled Tribes families, who were in possession of forest lands in the affected area prior to the 13th day of December, 2005, shall also be eligible for the rehabilitation and resettlement benefits under this policy.

7.22 AMENITIES AND INFRASTRUCTURAL FACILITIES TO BE PROVIDED AT RESETTLEMENT AREAS:

7.22.1 In all cases of involuntary displacement of four hundred families or more *en masse* in plain areas, or two hundred families or more *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, comprehensive infrastructural facilities and amenities notified by the appropriate Government shall be provided in the resettlement area(s). Such facilities and amenities shall, *inter alia*, include roads, public transport, drainage, sanitation, safe drinking water, drinking water for cattle, community ponds, grazing land, land for fodder, plantation (social forestry or agro-forestry), Fair Price shops, *panchayat ghars*, Cooperative Societies, Post Offices,

seed-cum-fertilizer storage, irrigation, electricity, health centres, child and mother supplemental nutritional services, children's playground, community centres, schools, institutional arrangements for training, places of worship, land for traditional tribal institutions, burial/cremation grounds, and security arrangements.

7.22.2 In cases of involuntary displacement of less than four hundred families *en masse* in plain areas, or less than two hundred families or more *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, all affected families shall be provided basic infrastructural facilities and amenities at the resettlement site(s) as per the norms specified by the appropriate Government. It would be desirable that provision of drinking water, electricity, schools, dispensaries, and access to the resettlement sites, amongst others, be included in the resettlement plan approved by the appropriate Government.

7.22.3 If relocation takes place in an existing settlement area, the same infrastructure shall also be extended to the host community.

7.22.4 While shifting the population of the affected area to the resettlement area, the Administrator for Rehabilitation and Resettlement shall, as far as possible, ensure that:

- a) In case the entire population of the village or area to be shifted belongs to a particular community, such population or families may, as far as possible, be resettled *en masse* in a compact area, so that socio-cultural relations and social harmony amongst the shifted families are not disturbed.
- b) In the case of resettlement of the Scheduled Caste affected families, it may, as far as possible, be ensured that such families are resettled in the areas close to the villages.

7.22.5 The appropriate Government shall ensure that a resettlement area forms part of a *gram panchayat* or municipality.

7.23 INDEXATION OF REHABILITATION GRANT AND OTHER BENEFITS:

The rehabilitation grant and other benefits expressed in monetary terms in this policy shall be indexed to the Consumer Price Index (CPI) with the first day of April following the date of coming into force of this policy as the reference date, and the same shall also be revised by the appropriate Government at suitable intervals.

7.24 PERIPHERY DEVELOPMENT:

In case of a project involving land acquisition on behalf of a requiring body, the requiring body will be responsible for development of the defined geographic area on the periphery of the project site as decided by the appropriate Government, and will be required to contribute to the socio-economic development of the areas contiguous to its area of operation. For this purpose, the requiring body will earmark a percentage of its net profit or, in case no profit is declared by the requiring body in a particular year, for that year, such minimum alternative amount as may be determined by the appropriate Government after consultation with the requiring body, to be spent within the specified zone. The requiring body will carry out the developmental activity within this zone in close coordination with the Commissioner for Rehabilitation and Resettlement. The State Governments will be free to frame their own rules and guidelines for this purpose.

CHAPTER - VIII

8. Grievance Redressal Mechanism

8.1 Rehabilitation and Resettlement Committee at the Project Level:

8.1.1 For each project which involves involuntary displacement of four hundred or more families *en masse* in plain areas, or two hundred or more families *en masse* in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution, the appropriate Government shall constitute a Committee under the chairpersonship of the Administrator for Rehabilitation and Resettlement, where appointed, or some other senior Government official, where the Administrator for Rehabilitation and Resettlement is not appointed, to be called the Rehabilitation and Resettlement Committee, to monitor and review the progress of implementation of the scheme or plan of rehabilitation and resettlement of the affected families, and to carry out post-implementation social audits.

8.1.2 The Rehabilitation and Resettlement Committee constituted as above shall include, apart from officers of the appropriate Government, as one of its members:-

- a representative of women residing in the affected area;
- a representative each of the Scheduled Castes and Scheduled Tribes residing in the affected area;
- a representative of a voluntary organisation;
- a representative of the lead bank;

- Chairperson(s) of the *panchayats* and municipalities located in the affected area, or their nominee(s);
- Members of Parliament and Members of Legislative Assembly of the area included in the affected area;
- the Land Acquisition Officer of the project; and
- a representative of the requiring body.

8.1.3 The procedure regulating the business of the Rehabilitation and Resettlement Committee, its meetings and other matters connected thereto shall be such as may be prescribed by the appropriate Government.

8.2 Rehabilitation and Resettlement Committee at the District Level:

8.2.1 In each district, the State Government shall constitute a standing Rehabilitation and Resettlement Committee under the chairpersonship of the District Collector or, as the case may be Deputy Commissioner of the district, to monitor and review the progress of rehabilitation and resettlement of the affected families in the district excluding those covered by the Rehabilitation and Resettlement Committees at the project level as prescribed in paragraph 8.1.

8.2.2 The composition, powers, functions and other matters relating to the functioning of the Rehabilitation and Resettlement Committee at the District Level shall be such as may be prescribed by the State Government.

8.3 Ombudsman:

8.3.1 An Ombudsman shall be appointed by the appropriate Government, in the manner as may be prescribed, for time-bound disposal of the grievances arising out of the matters covered by this policy.

8.3.2 Any affected person, if aggrieved, for not being offered the admissible rehabilitation and resettlement benefits as provided under this policy, may move an appropriate petition for redressal of his or her grievances to the Ombudsman concerned.

8.3.3 The form and manner in which and the time within which complaints may be made to the Ombudsman and disposed of shall be such as may be prescribed by the appropriate Government.

8.3.4 The Ombudsman shall have the power to consider and dispose of all complaints relating to rehabilitation and resettlement against the decision of the Administrator for Rehabilitation and Resettlement or Rehabilitation and

Resettlement Committee and issue such directions to the requiring body, the Administrator for Rehabilitation and Resettlement (where appointed, or the other senior Government official appointed for rehabilitation and resettlement, where the Administrator for Rehabilitation and Resettlement is not appointed; or the District Collector/Deputy Commissioner, as the case may be) as he may deem proper for the redressal of such grievances relating to implementation of this policy.

8.3.5 In case of a project involving land acquisition on behalf of a requiring body, the disputes related to the compensation award for the land or other property acquired will be disposed of as per the provisions of the Land Acquisition Act, 1894 or any other Act of the Union or a State for the time being in force under which the acquisition of land is undertaken, and will be outside the purview of the functions of the Ombudsman.

8.4 Inter-State Projects:

- 8.4.1 In case a project covers an area in more than one State or Union territory where the project affected families are or had been residing, or proposed to be resettled, the Central Government in the Ministry of Rural Development (Department of Land Resources) shall, in consultation with the concerned States or Union territories, as the case may be; appoint the Administrator for Rehabilitation and Resettlement, the Commissioner for Rehabilitation and Resettlement, a common Rehabilitation and Resettlement Committee, and the Ombudsman for the purposes of this policy.

8.4.2 The method of implementation of the rehabilitation and resettlement schemes or plans shall be mutually discussed by the State Governments and the Union territory Administrations, and the common scheme or plan shall be notified by the Administrator for Rehabilitation and Resettlement in the States or Union territories, as agreed to, in accordance with the procedure laid down under this policy.

8.4.3 If any difficulty arises in the implementation of the rehabilitation and resettlement schemes or plans, the matter shall be referred to the Central Government in the Ministry of Rural Development (Department of Land Resources) for its decision, and the decision of the Central Government shall be binding on the concerned States and Union territories.

CHAPTER – IX

9. Monitoring Mechanism

9.1 National Monitoring Committee:

9.1.1 The Central Government shall constitute a National Monitoring Committee, to be chaired by the Secretary, Department of Land Resources for reviewing and monitoring the progress of implementation of rehabilitation and resettlement schemes or plans relating to all cases to which this policy applies. The Committee will have the following or his nominee not below the rank of Joint Secretary as its members:

Secretary, Ministry of Agriculture;
Secretary, Ministry of Coal;
Secretary, Ministry of Commerce;
Secretary, Department of Industrial Policy and Promotion;
Secretary, Ministry of Defense;
Secretary, Ministry of Environment and Forests;
Secretary, Ministry of Law and Justice;
Secretary, Ministry of Mines;
Secretary, Ministry of Panchayati Raj;
Secretary, Planning Commission;
Secretary, Ministry of Power;
Secretary, Department of Road Transport and Highways;
Secretary, Ministry of Railways/Chairman, Railway Board;
Secretary, Ministry of Social Justice and Empowerment;
Secretary, Ministry of Tribal Affairs;
Secretary, Ministry of Urban Development; and
Secretary, Ministry of Water Resources.

Besides, in case of a project involving land acquisition on behalf of a requiring body, the Secretary of the concerned administrative Ministry or Department shall be invited as one of the members. Secretary of any other Ministry or Department, and independent expert(s) of eminence in the relevant field(s) may be made special invitee(s) to this Committee.

9.1.2 The duties and procedures of the National Monitoring Committee shall be such as may be prescribed.

9.2 National Monitoring Cell:

9.2.1 The National Monitoring Committee shall be serviced by a National Monitoring Cell to be constituted by the Central Government for reviewing and monitoring the progress of implementation of rehabilitation and resettlement schemes or plans relating to all cases to which this policy applies.

9.2.2 The National Monitoring Cell constituted under this policy shall be headed by an officer not below the rank of Joint Secretary to the Government of India, and shall be suitably staffed for efficient functioning.

9.3 Information Sharing:

9.3.1 All information on displacement, rehabilitation and resettlement, with names of the affected persons and details of the rehabilitation and resettlement package, shall be placed in the public domain on the Internet as well as shared with the concerned *gram sabhas*, *panchayats*, etc. by the project authorities.

9.3.2 The States and Union territories shall provide all the relevant information on the matters covered by this policy to the National Monitoring Cell in a regular and timely manner, and also as and when required.

9.4 Internal Oversight:

9.4.1 For each major project covered by this policy, there shall be an Oversight Committee for rehabilitation and resettlement in the Ministry/Department concerned of the appropriate Government.

9.4.2 The composition, functions and procedures of this Committee shall be such as may be prescribed by the appropriate Government.

9.5 External Oversight:

9.5.1 A National Rehabilitation Commission shall be set up by the Central Government with the power to exercise external oversight over the rehabilitation and resettlement of affected families covered by this policy.

9.5.2 The composition, powers and the procedure of transaction of business of the National Rehabilitation Commission shall be such as may be prescribed.

9.6 Commencement:

The National Rehabilitation and Resettlement Policy, 2007 shall come into effect from the date of its publication in the Gazette of India (Extraordinary).

Dr. SUBAS CHANDRA PANI, Secy.

9-AUG-2001 10:00 FAX-011-4619393

FAX - 011-4619393

D.O.No.2996B/2001-27-Sin-4

B.M.Arora,
Special Secretary.

U.P. Govt.
Sinchai-4

AUG - 9 2001

Lucknow: Dated: Aug. 6, 2001

My dear Lim,

Uttar Pradesh Water Sector Resettlement & Rehabilitation Policy has been issued vide U.P. Govt. order no. 2996/2001-27-Si-4 dated 03-08-2001. A copy of the said policy is enclosed for your kind information and necessary action in the matter.

Encl: As above.

Yours Sincerely,


(B.M.Arora)

Mr. Edwin Lim,
Country Director,
World Bank,
New Delhi.

FILE	Aug 10, 2001
FILE (C)	U.P. S.R.P.
ACTION BY	Raj
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August 3, 2001

Government of Uttar Pradesh

Irrigation Department

UTTAR PRADESH WATER SECTOR

Resettlement & Rehabilitation Policy

(Issued vide G.O.No 2996/01-27-Si-4, Dated August 3, 2001)

UTTAR PRADESH WATER SECTOR Resettlement & Rehabilitation Policy

1. Introduction

1.1 The Government of Uttar Pradesh (GOUP) through the Irrigation Department has designed development intervention with an aim to pilot reforms options for enhancing the productivity of water, increasing crop production and over all well being of the people.

1.2 A major reforms program for UP's Water Sector would seek to restructure the Sector to significantly improve performance in water resources planning, allocation and management for sustained multi-sectoral use, adopting a river basin approach. While the development benefits are likely to bring poverty reducing impacts on the lives of poor people, the upgradation of irrigation and drainage systems, is likely to involve acquisition of private lands or alienation of public land and properties mostly for construction of canals, drains, approach roads, structures and associated civil activities. It is recognized that such losses may dismantle their previous production system and livelihood and to mitigate such adverse impacts, the need is to adopt developmental approach rather than the welfare approach. The State Water Policy of 1999 also recognises the need for a special focus on the resettlement and rehabilitation of the affected people in water sector.

2. Possible Project Impacts

In the Water Sector, the following are the likely impacts, which may negatively affect the local population. These have been categorized in the three broad groups:

- i. Loss of immovable assets i.e. agricultural land, Homestead, cattle sheds, wells, ponds, trees, commercial establishments, community infrastructure etc.;
- ii. Loss of livelihood or income opportunity on account of loss of agricultural land.
- iii. Impact on the community in terms of loss of common property resources or access to it.

3. Principles

These guidelines detail out the assistance and supporting re-establishing the homes and livelihoods of the Project Affected People(PAP) to help them regain the previous living standards or leave them better-off. The broad principles for planning and implementing the Resettlement and Rehabilitation programs are given below:

- 3.1 Avoid or minimize acquisition of land and other assets and reduce negative social and environmental impacts. In an effort to minimize the losses, where ever possible explore all viable alternative project design. Efforts should be made towards the enhancement of the positive impact of the projects, especially for the PAPs;
- 3.2 Wherever negative impacts are unavoidable, efforts should be made either to improve the standard of living of the affected persons or at least assist them in restoring their previous standard of living at no cost to them;
- 3.3 Lack of ownership or title to the acquired project does not deprive the affected persons to get support in their resettlement and rehabilitation.
- 3.4 People's participation in planning their own resettlement and rehabilitation enabling them opportunities to share development benefits, is central to resettlement and rehabilitation. The affected population should be involved through out the process of planning and implementation of resettlement programs.
- 3.5 Integration of the resettling population with the host community should be ensured, enabling them to share the development benefits and also blend within the planning framework, the requirement of necessary infrastructure on account of the added population pressure and the possible future population growth;
- 3.6 In planning for the resettlement and rehabilitation, care should be taken to preserve the interest of women, youth and other interest groups and particularly the traditional land rights and customs. In case of tribals, specific Indigenous People's Development Plans need to be prepared to address their issues.
- 3.7 Support will be extended under the policy to meet the replacement cost of the assets;
- 3.8 If after acquisition, the remaining asset becomes operationally non-viable the remaining portion will be acquired and compensated at replacement cost.
- 3.9 No construction activities will be initiated unless the land and properties are compensated and support extended for R & R.
- 3.10 While planning for developing resettlement sites for displaced community the project it should be ensured that there are no adverse social, economic and environmental effects of displacement on the host communities through consultation during the process planning and implementation. Wherever required specific measures will be taken to meet the additional demand for resources.

4. Definitions

The following definitions enable the implementing authorities to translate the Policy objectives to assist those suffering losses on account of any physical/civil works:

- 4.1 "Project Affected Person" means a person who is affected on account of the land acquisition or appropriation of land home stead land and structures thereon and loss of trade and occupation and livelihood due to construction of the project.
- 4.2 "Project Displaced Persons" are the persons who have lost total livelihood derived from the assets affected by the project and/or have become homeless.
- 4.3 "Project Affected Family" means:

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- 4.3 "Project Affected Family" means:

- i. Affected person and his/her spouse and minor children;
 - ii. Every son irrespective of his marital status above the age of 18 years;
 - iii. Every unmarried daughter above the age of 18 years;
 - iv. Divorced, widowed, abandoned, separated or single unwed mother living separately;
 - v. Disabled and orphans.
- 4.4 "Encroacher" means, a person who has trespassed Government/ private/ community land to which he/ she is not entitled to.
- 4.5 "Squatter" is a person who has unauthorisedly settled on the land or building for shelter or livelihood.
- 4.6 "Land less/ agriculture labor" is a person who does not hold any agricultural land and has been deriving his main income by working on the land of others on wage labor.
- 4.7 "Below Poverty Line" is a sum fixed by the Planning Commission, Government of India.
- 4.8 "Vulnerable Person" will include the following:
- i. the people living Below Poverty Line (BPL) as defined by the Government of India;
 - ii. Members of the Schedule Caste/ Tribe community/ Other Backward Caste;
 - iii. Women headed households;
 - iv. Orphans and destitute;
 - v. Disabled and aged;
 - vi. Land less persons.
- 4.9 "Cut -Off Date" means the date of issuing notice under section 4(1) of the Land Acquisition Act of 1984 and its amendments for titleholders.
- 4.10 For the non-title holders the cut- off date is the date of Census Survey which should be completed 2 years prior to the section 4(1) notice under the L. A Act.

5. Procedures

The following are the main procedures that will be adopted for the resettlement programs in the water sector.

- 5.1 Policy recognizes that along with the positive aspects of infrastructure development, there can also be negative impacts, hence, both Project Displaced Persons(PDPs) and Project Affected Persons(PAPs) will be entitled to their own respective packages;
- 5.2 During the project preparation, alternative designs will be examined to minimize acquisition of land and other assets and to reduce negative socio-economic impacts. This may include realigning linear construction like canals, roads, drains, etc and alternate locations for structures.
- 5.3 People losing their home represent a particular challenge in the resettlement program. The resettlement site should be selected with the majority of the displaced persons agreeing for the site, with no secondary displacement

involved. Every effort will be made to ensure that the land is developed for the new housing site, the Plots are drawn and allocated to the individual displaced families, as per their entitlements. Drinking water facilities as per the State Government norms are provided, the approach roads are constructed, the electric poles with connection points to be drawn by individual families are provided, the community land, provision for religious place- Temples/ Mosque are made;

- 5.4 If the project impact leads to people being unable to continue, with the previous occupation, the project will provide support and assist through alternative employment strategies that are acceptable to the Project Displaced Persons. Long- Term earning opportunities will be provided through strategies such as vocational training, employment counseling, inclusion in income generating schemes, and access to credit, etc
- 5.5 Absence of legal title to the land will not be a bar to the people from rehabilitation assistance. However, compensation for the land will be not be extended to the encroachers and squatters, considering the illegal nature of their possession.
- 5.6 Identification of encroachers and squatters, in case they do not possess ration cards, would be sought from the voter's list, or any other legal document or information from the community. In the absence of any supporting legal documents, finding of the census survey shall be deemed final and will be relied upon.
- 5.7 In the case of disabled, divorced and separated women, the procedures involved on their identification are detailed below:
 - i. The cases of claims of disabled affected persons, should be certified by registered and duly authorized medical practitioner. The certificate furnished by the medical practitioner should indicate the nature and percentage of disability. In case of any doubt, the case may be referred to the Medical Board, by the competent authority, and only after the receipt of the report from the Medical Authority, the claim will be disposed of on its own merit.
 - ii. For the purpose of treating women as divorces, legal document, if any, in support of the claim will be required. The claimant can also make an affidavit and file her claim along with a copy of such affidavit for eventual decision after due enquiry by the Resettlement Officer (R.O) of the project.
- 5.8 Efforts will be made to ensure consultation, involving the people, the Non-Government Organizations(NGOs) and stakeholders in planning, implementation and monitoring of the project through focused discussion, workshops at different levels. Separate consultations should be held with vulnerable people including tribals. All these consultations should lead to minimize risks involved and develop appropriate mitigation measures.
- 5.9 This is a public document and all concerned have a right to have full information. Hence, copies of this document will be translated in local language (Hindi) and made available for information to the public and distributed to the affected people. Interested persons may contact project authorities for further details.

- 5.10 The project will ensure that no civil works are initiated before full payment of compensation is completed and all assistance provided to move to their relocation sites in their reconstructed habitats/homes.
- 5.11 Before taking possession of the acquired property sufficient time will be provided to harvest the standing crops.
- 5.12 Notice will be served to dismantle structures, salvage material and transfer to the new site.

6. Land Acquisition and Payment of Compensation to PAPs and PDPs (as specified in Section 4 of this policy)

- 6.1. Land surveys for payment of compensation shall be carried out on the basis of updated official land tenancy records and ground facts. The land records shall be updated relating to title/ classification / current use of land in consultation with the people.
- 6.2 If the residual land is less than the average land holding in the district (as determined by the Revenue department, GOUP) the owner of the land shall have the right to seek acquisition of his entire contiguous holding. Similarly if the residual part of the structure becomes unlivable/unusable, the owner shall have the right to seek acquisition of the left over part.
- 6.3 The compensation for the land and properties to be acquired, shall be paid according to the provisions of the Land Acquisition Act of 1894 and its amendments.
- 6.4 Compensation of trees will be based on their market value in case of timber bearing trees and in case of fruit bearing trees, as per the rates decided by the competent authority in consultation with the Department of Agriculture, Forest, Horticulture, Sericulture etc. as the case may be.
- 6.5 Compensation for the properties belonging to the community or for common places of worship, which are acquired for the project shall be provided to enable construction of the same at the new place through the local self-governing bodies. The replacement will be in kind through community participation.
- 6.6 Compensation shall be paid and efforts will be made to complete the R&R of PAPs/PDPs before taking possession of the land/properties. The PDPs and PAPs shall hand over the land and properties acquired to the Government free from all encumbrances such as mortgage, debt, etc., pertaining to the lands and properties acquired. However, in case of any loans on such acquired lands and properties given to the PAP by any Govt. agency remains unadjusted as per the information furnished by the PAPs or by the loaner agency, then such amounts shall be deducted out of total compensation.

7. R & R assistance

- 7.1 All PAPs will be entitled to R&R assistance over and above the compensation received under the Land Acquisition Act. The non-titleholder PAPs are not entitled for compensation (encroachers and Squatters) but will get R&R assistance.
 - (a) The R&R assistance will be extended to only those PAPs who are identified on or prior to the cut-off date.

- (b) Grievances regarding R&R assistance should be dealt by a Committee to be set up for this purpose.
- 7.2 The transition period will be minimized in resettlement process. Personal and individual attention will be paid towards assisting affected families during their resettlement.
- 7.3 If compensation for structures is less than the cost of Weaker Section Housing scheme of the Government of India, then the difference will be paid as *ex-gratia*.
- (a) Fixing up the market value of homestead land will be as per the replacement cost considered for agricultural land.
- (b) The houseless displaced families will be assisted to get shelter under Weaker Section Housing Scheme of the Government of India free of cost.
- 7.4 New settlement sites with necessary infrastructure for relocating displaced families and will be close to the original place of habitation.
- (a) Wherever the PDPs do not opt for such site, and prefer cash, then assistance in lieu of the house site/shop will be given to them.
- (b) At the new resettlement centers, basic civic amenities as listed by the Government of India, viz drinking water, internal and link roads, medical facilities, schools, electricity etc. will be provided along with any other amenities which the PDPs enjoyed at their abandoned place.
- (c) Special attention will be given to ensure that alternative arrangements will be made for those people whose livelihoods were dependent on public lands.
- 7.5 Wherever possible, land for land for agriculture purposes will be provided. The size of the alternate agricultural land provided will not be less than the average landholding in the district.
- 7.6 In case of shops and houses, the size of the alternate plots will be
- (a) 100 sq. mt. for plots greater than 100 sq. mt.
- (b) 50 sq. mt. for plots below 100 sq. mt.
- (c) 25 sq. mt. for shops.
- (d) these alternate plots will be free of cost for the vulnerable people (as defined in Section 4.8 of this policy).
- 7.7 Alternate agricultural lands/ houses/ shops will be in the joint name of husbands and wives. Cost of registration of the sale deed to that effect would be borne by the project authority.
- 7.8 To ensure replacement cost following methods will be considered:
- i. Taking into consideration 20 times of the annual value of gross production of concerned land, averaged over preceding five years;
 - ii. Taking into account such prescribed rates or the average of the actual transaction rates of similar lands for contemporary years for which sale deeds are registered;
 - iii. Fixing up market value of land equal to minimum land value if so prescribed by the State Government under Indian Stamp Act for the purpose of registration of sale deeds under the Indian Registration Act of 1908 and any amendment thereof.
 - iv. Undertaking a land market survey to assess the prevailing land prices in the area.

The replacement cost to be fixed up by the project authorities, shall be the amount, which shall be the highest among the four amounts, arrived at by aforesaid four alternative methods. In case the replacement value is higher than

compensation amount determined by the competent authority, the difference shall be paid in the form of assistance.

- 7.9 The value of houses, buildings and other immovable properties of the Project Displaced Persons(PDPs) and Project Affected Persons(PAPs) shall be determined for the purpose of payment of compensation , without deducting the depreciation value;
- 7.10 Additional economic rehabilitation grant calculated for one-year income level as determined by the Planning Commission, Government of India, for the below-poverty-line (BPL) level will be provided for the affected vulnerable families (as defined in section 4 of this policy).
- 7.11 Allowances for PDPs:
 - (a) Transitional allowances will be provided to project displaced families.
 - (i) In case of loss of shelter, the transitional allowances will be provided to each project displaced family calculated at the minimum wages per month for a duration of six months for one member of the family
 - (ii) In case of loss of livelihood, the transitional allowances for each family will be calculated at the minimum wages per month for a duration of six months for one male earning member and one female earning member of each family
 - (b) In case of loss of livelihood, subsistence allowance will be provided and calculated at minimum wages per month for a duration of six months for one male earning member and one female earning member of each family
 - (c) Shifting allowance will be provided as a lump-sum of Rs. 1000 (calculated at 2001 Price Index)
 - (d) Rental allowance shall be provided to the affected families at the rate of Rs. 500 per month (calculated at 2001 Price Index) for a period of six months
- 7.12 The R&R activity in respect of the tribal people should be adapted to their needs and environment. Customary rights and land tenure system of the tribal PDPs and PAPs should be protected.
- 7.13 Training for skill up gradation or those related to income generation will be provided as a part of rehabilitation assistance. Training for up-gradation of skills to enable the PDPs and PAPs to be able to begin new livelihood, through income generation programs with the help of NGOs.
- 7.14 Payment of compensation and other R&R monetary assistance through cheques should be carried out in a total transparent manner, in Village Meetings in presence of Pradhan and other villagers.

8. Other Assistance

- 8.1 The affected population will be assisted in getting their names included in the voter's lists of the area of their resettlement.
- 8.2 For the purpose of treating the divorces and widows having no source of livelihood as separate family, benefits like old age pension etc, availed off by them should not be taken into account.
- 8.3 The project will ensure that PAPs get preference in job with the contractors during the construction phase.

9. Guidelines for planning and implementing R&R

The main objective of the resettlement and rehabilitation is to enable the displaced or affected people to share the development benefits and that, they are re-established in a manner that their previous standard of living is restored or improved. For proper rehabilitation of the project affected and displaced persons, social impact assessment shall be undertaken. This will help in assessing the magnitude of displacement, losses to be sustained by PDPs and PAPs, better targeting of vulnerable groups, ascertaining the cost of R&R, drawing out the rehabilitation package and administering the same. Detailed procedures for preparation of the relocation sites have been presented else where in this Policy. In order to achieve this the following steps in a systematic manner will have to be taken up:

9.1 Socio-Economic Impact Assessment Survey:

The socio-economic base line survey should be conducted within two years of the publication of the section 4(1) notification of LA Act.

- i. Identify the affected area through maps and consultations with the local communities. This will form the basis for issuing of identity cards to the eligible families.
- ii. Baseline survey - census verification of 100% of the affected population and the loss of properties
- iii. A detailed sample socio-economic survey including consultation, focus group discussions, etc.
- iv. A survey among the host community to identify issues relating to the relocation of displaced population
- v. Identify and analyze social structures, norms, customs, cultural centers, traditional rights including those related to common properties and practices, leadership pattern, social networking

9.2 Preparation of Resettlement Action Plan:

- i. A comprehensive plan for resettlement will be drawn up in advance by the project authorities based on the census and socio-economic surveys. The entire plan for resettlement should be prepared by the project authorities in consultation with all stakeholders including local representatives, NGOs/CBOs and PAPs.
- ii. The RAP will include census of affected people, their losses and specific entitlements and assistance, alternatives for economic rehabilitation, participatory framework, mechanism for implementation, monitoring and grievance redress, schedule of tasks and budget.
- iii. Where there are tribal groups affected by the project, an IPDP needs to be prepared to address specific issues not covered in RAP.

9.3 Planning for relocation:

The RAP will include:

- i. identification of New Resettlement sites in consultation with the displaced and host population
- ii. identify the necessary infrastructure and common properties to be developed at the new sites
- iii. arrangements during shifting and transition period
- iv. address specific issues related to women, tribals and other vulnerable groups

9.4 Planning for economic rehabilitation:

- i. identify livelihood alternative feasible in the area in consultation with the affected community with emphasis on the needs of the vulnerable groups particularly women, tribals and others
- ii. focus should be on land based activities and where such possibilities are not feasible, identify alternate opportunities and provide both backward and forward linkages for the success of restoration of livelihood.

10. **Organizational structure**

- 10.1 At the state level the Directorate of Land Acquisition (of Irrigation Department) will be strengthened to include resettlement and monitoring for all water resources projects the state. This Directorate will be under the Chief Engineer Projects reporting directly to Engineer-in-Chief, as indicated in the organogram (annex 1).
- 10.2 For the proposed pilot projects, each of the sub-basin will have one Rehabilitation Officer of the rank of Executive Engineer who will coordinate with the revenue department for all LA issues.
- 10.3 At the project level, a full fledged R&R Cell will be created for major projects where large scale displacement (i.e. over 200 families) is involved. Staffing requirements of the R&R Cell will be determined according to the needs of the specific projects. The State Govt. or the district Collector shall nominate the L.A.O.

11. **Monitoring and Post-Project Evaluation**

- 11.1 During and on completion of the R&R work, project authorities will monitor the progress the resettlement and rehabilitation activities and its impact on the PAPs and the host population. The socio- economic survey undertaken during the project preparation will provide benchmarks for comparison on the socio-economic status of the PAPs in the post- project period. While regular monitoring of physical and financial aspects of the project will be conducted by the project

authorities, annual, mid-term and end-term evaluation of resettlement and rehabilitation implementation process will be carried out by an external agency with the participation of the representatives of the PAPs/ PDPs themselves. Suggestions made in the evaluations report will be incorporated in the RAP/ revised RAP to make the R&R programs more effective.

- 11.2 Grievance redress mechanism should be in place at the time of initiating the implementation of RAP and civil construction activities in the area. For this purpose a grievance redress committee will be formed in each project with representation from the affected community.

12. Dissemination of Information

- 12.1 The R&R Policy should be made available in local language and should be distributed.
- 12.2 The executive summary of RAP should be translated in the local language and distributed.
- 12.3 Information on the project should also be made available to the public.

13. Budget

- 13.1 The cost of compensation and R&R related activities will be an integral part of the overall project cost. There should be time frame for implementing and completing all R&R activities related to the project.

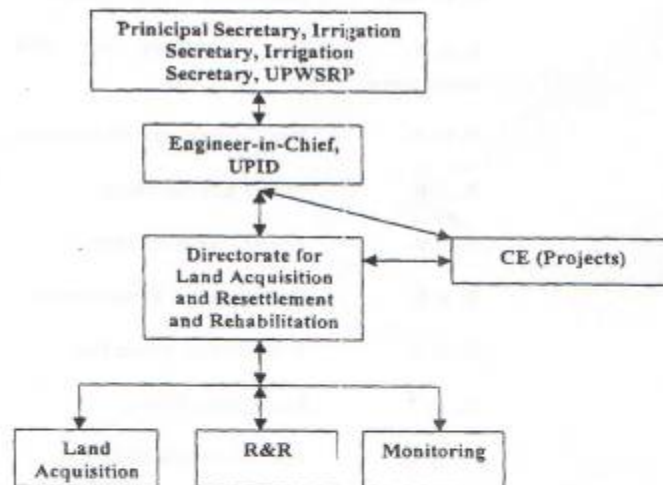
14. Scope for making amendments in the R&R policy

- 14.1 The State government can make amendments as and when required.
- 14.2 A systematic review process will be put into place, including
 - (a) Public consultation to be conducted by the District Collectors which would provide feedback to the Divisional Commissioners
 - (b) A committee chaired by the Director, Land Acquisition (of Revenue Department) shall be created to monitor the implementation of this Policy and suggest modifications if any every five years or as required taking into account the feedback provided by the Divisional Commissioners.

ABBREVIATIONS USED

B. P. L.	Below Poverty Line
C. P. R.	Common Property Resources
C. B. O.	Community Based Organization
G. O. U. P.	Government of Uttar Pradesh
L. A. A.	Land Acquisition Act 1984 and its amendments
N. G. O.	Non-Governmental Organization
P. A. P.	Project Affected Person
P. D. P.	Project Displaced Person
R. & R.	Resettlement & Rehabilitation
R. A. P.	Rehabilitation Action Plan
R. O.	Resettlement Officer
L. A. O.	Land Acquisition Officer
U. P. I. D.	Uttar Pradesh Irrigation Department
W. S. R. P.	Water Sector Restructuring Project

Annex-1
Institutional Arrangements for R&R in UPID



संख्या-1262/1-13-10-29(29)/2004

विषय:

बैठक सिन्हा
प्रमुख सचिव,
उत्तर प्रदेश शासन।

संख्या 1

1. समस्त प्रमुख सचिव/सचिव
उत्तर प्रदेश शासन।
2. समस्त विभागाध्यक्ष, 4090।
3. समस्त माध्यामिका/जिलाधिकारी,
उत्तर प्रदेश।

राज्य अनुमान-13

लखनऊ दिनांक-17 अगस्त, 2010

विषय: भूमि अधिग्रहण के मामलों में परियोजना से प्रभावित परिवारों के पुनर्वास एवं पुनर्वास के सम्बन्ध में।

संदर्भ:-

प्रदेश में भूमि अधिग्रहण से सम्बन्धित परियोजनाओं में प्रभावित परिवारों के पुनर्वास एवं पुनर्वास के सम्बन्ध में निर्गत शासन-पत्र संख्या: 1262/1-13-2004-20(29)/2004-3013, दिनांक-10 अगस्त, 2004 एवं संख्या: 361/1-13-2006-20(29)/2004-3013, दिनांक-28 फरवरी, 2006 में विस्थापित परिवारों के पुनर्वास एवं पुनर्वास हेतु प्रत्येक लाभ-आयुक्त की नियुक्ति की आवश्यकता की गई है। मुझे यह कहने का निर्देश हुआ है कि सभी ऐसे विभाग विभाग द्वारा भूमि अधिग्रहण की कार्यवाही की जा रही है, के द्वारा तदनुसार नियुक्ति की अधिसूचना तैयार निर्गत की जाये।

2. पुनर्स्थापन और पुनर्वास प्रशासक/आयुक्त के पर्यवेक्षण निर्देशों तथा नियंत्रण के अर्थात् पुनर्स्थापन तथा पुनर्वास के लिए सभी उपाय सुनिश्चित किया जाएगा तथा उनके द्वारा निम्नलिखित कार्यों/कर्तव्यों को निष्पादित किया जावेगा:

- (i) व्यक्तियों के विस्थापन को न्यूनतम करना और अविप्रेक्ष्य निकाय के साथ परामर्श से गैर-विस्थापन या कम से कम विस्थापन किए जाने के विकल्पों को अभिप्रेक्षित करना।
- (ii) पुनर्स्थापन तथा पुनर्वास के लिए स्वीय/योजना तैयार करते समय परिवोजना प्रभावित परिवारों के साथ परामर्श करना।
- (iii) परिवोजना से प्रतिबन्धित प्रभावित क्षुब्धित जनजातियों तथा कमजोर वर्गों के परिवारों के हितों की सुरक्षा सुनिश्चित करना।
- (iv) यथा उपेक्षित पुनर्स्थापन तथा पुनर्वास योजना/स्वीय का प्रारूप तैयार करना।
- (v) परिवोजना प्रभावित परिवारों तथा अविप्रेक्ष्य निकाय, जिसके लिए भूमि अधिष्ठित की जाती है, के प्रतिनिधियों के साथ परामर्श से भूमि अधिष्ठन के विभिन्न संघटकों, पुनर्स्थापन तथा पुनर्वास कार्यक्रमों या कार्यक्रमों के अनुसन्धित तथ्य सहित मजदूत तैयार करना।
- (vi) परिवोजना प्रभावित परिवारों को अनुमन्त्र लाभ स्वीकृत करना।
- (vii) ऐसे अन्य कार्यों को पूरा करना जो सम्बन्धित सरकार द्वारा समय-समय पर निर्धारित आदेश द्वारा होते जाएं।

3. परियोजना प्रभावित परिवारों को दी जाने वाली सुविधाएँ:

- (क) ऐसे प्रत्येक परियोजना प्रभावित परिवार, जिसकी प्रभावित क्षेत्र में कृषि भूमि हो तथा जिसकी पूरी भूमि अर्जित की गई हो, को उसकी आजीविका की क्षतिपूर्ति के लिए 05 वर्षों की न्यूनतम कृषि मजदूरी की बराबर एवमुक्त अनारक्षित वित्तीय सहायता के रूप में दी जाएगी।
- (ख) प्रभावित क्षेत्र में कृषि भूमि रखने वाले ऐसे प्रत्येक परियोजना प्रभावित परिवार जिसकी पूरी भूमि अर्जित नहीं की गई है और भूमि अर्जन के परिणामस्वरूप वे सीमान्त किसान बन गए हैं, को 500 दिनों की न्यूनतम कृषि मजदूरी के बराबर एक बार दी जाने वाली सहायता के रूप में वित्तीय सहायता दी जाएगी।
- (ग) ऐसे प्रत्येक परियोजना प्रभावित परिवार, जिसकी प्रभावित क्षेत्र में कृषि भूमि हो तथा जो भूमि अर्जन के परिणामस्वरूप छोटे किसान बन गए हों, को 375 दिनों की न्यूनतम कृषि मजदूरी के बराबर एक बार दी जाने वाली सहायता के रूप में वित्तीय सहायता दी जाएगी।
- (घ) कृषि श्रमिक या गैर-कृषि श्रमिक की श्रेणी से संबंधित प्रत्येक परियोजना प्रभावित परिवार को 625 दिनों की न्यूनतम कृषि मजदूरी के बराबर एक बार दी जाने वाली सहायता के रूप में वित्तीय सहायता दी जाएगी।

(ग) परियोजना प्रभावित परिवारों को पुनर्वास्यता तथा पुनर्वास लाभों के अन्तर्गत स्व-तैजसा परियोजनाएं आरम्भ करने हेतु चरमोक्त धन अर्थात् वित्तियत करने के लिए अपेक्षित प्रशिक्षण सुविधाएं मुहैया करवाया जाएगा।

4. यदि भूमि अर्जन किसी प्राधिकरण के प्रयोजन हेतु किया जाता है, तो पुनर्वास एवं पुनर्वास्यता पर आने वाला धन व्यय भूस्वाम्य की अर्जा में जोड़ा दिया जाएगा, जिसे निर्धारित होता है कि जोधपुर जिले में भूमि अर्जा भूस्वाम्य किसी सरकारी संस्था/निजी संस्था अथवा व्यक्तियों को आवंटित किया जाता है, तो उसे प्राधिकरण द्वारा लिया जाएगा। इसी प्रकार यदि भूमि अर्जन किसी कम्पनी के लिए किया जाता है तो पुनर्वास तथा पुनर्वास्यता पर होने वाला समस्त व्यय सम्बन्धित कम्पनी से लिया जाएगा।

5. अधिवृद्ध से सम्बन्धित समस्याओं के निराकरण की व्यवस्था प्रदेश में भूमि अधिवृद्ध में आने वाली समस्याओं के समाधान हेतु प्रत्येक जिले में भूमि अधिवृद्ध करने से पहले और बाद में भी सरकार की विभागों के साथ आम बैठकियाँ नहीं करने की स्थिति में उन्हें सुलझाने हेतु निम्नानुसार दो स्तर पर कमेटी गठित की जाती है:

क. मण्डल स्तरीय समिति

1. मण्डलाध्यक्ष

अध्यक्ष

2. सम्बन्धित जिलाधिकारी

सदस्य

3.	सम्बन्धित वॉरन्ट पुलिस अधीक्षक/ असाथी उभ महापरीक्षक	सदस्य
4.	सम्बन्धित विभाग के मण्डल स्तर एवं जिला स्तरीय अधिकारी	सदस्य
5.	सम्बन्धित तहसील का उपनिरीक्षक	सदस्य
6.	सम्बन्धित तहसील का पुलिस तपासीसूत्र	सदस्य

8. राज्य स्तरीय समिति

1.	प्रमुख सचिव, गृह, उभरा सारन	अध्यक्ष
2.	प्रमुख सचिव, मुख्य मंत्री-I	सदस्य
3.	प्रमुख सचिव, मुख्य मंत्री-II	सदस्य
4.	सचिव, मुख्य मंत्री, उभरा सारन।	सदस्य

6. यदि मण्डल स्तरीय समिति से समझा बन निराकरण नहीं हो पाता है तो उक्त समिति द्वारा अपनी आस्था एवं संतुष्टि राज्य स्तरीय समिति को सौंपित किया जायेगा।

7. भूमि अर्जन के सम्बन्ध में अधिसूचना सम्बन्धी विवाद तथा पुनर्वास एवं पुनर्वासन सम्बन्धी प्रमति की समीक्षा मण्डलस्तरीय की शारिक बैठक में प्रत्येक सत्र की जायेगी।

8. उक्त मुद्दे यह कहते कि निर्देश हुआ है कि उपरोक्त संशोधित आदेश तत्काल प्रभाव से लागू होंगे।

9. उक्त आदेशों का पत्राई से अनुपालन सुनिश्चित किया जाए।

भवदीय

(कैमकेत सिन्हा)
प्रमुख सचिव।

संख्या-1262(1)/1-13-2610 तदु दिनांक।

अधिलेख (अधिलेख) का पृथक्पथ एवं आवश्यक जानकारी हेतु, सूचना

1-समस्त बरिष्ठ पुलिस अधीक्षक/प्रभारी एवं महानिरीक्षक/पुलिस
अधीक्षक, 3090।

2-समस्त सहायी के उपनिरीक्षक, 3090।

3-समस्त सहायी के पुलिस अधीक्षक, 3090।

आज्ञा है

(विष्णु प्रताप सिंह)
निरीक्षक (अधीक्षक)

प्रेषक,

फै०के०सिन्हा,
प्रमुख सचिव,
उत्तर प्रदेश शासन।

सेवा में,

- 1-समस्त प्रमुख सचिव/सचिव,
उत्तर प्रदेश शासन।
- 2-समस्त मण्डलायुक्त/जिलाधिकारी,
उत्तर प्रदेश।

राजस्व अनुभाग-13

लखनऊ दिनांक ०१ दिसम्बर, 2010

विषय:- विभिन्न विभागों द्वारा भूमि अधिग्रहण करने के संबंध में दिशा निर्देश।
महोदय,

उपर्युक्त विषयक के संबंध में मुझे यह कहने का निदेश हुआ है कि विभिन्न सार्वजनिक प्रयोजनों हेतु किये जाने वाले भूमि अर्जन के कार्य को अधिक सुगम, स्वीकार्य एवं विवाद रहित बनाये जाने के उद्देश्य से निम्नलिखित बिन्दुओं को ध्यान में रखते हुए आवश्यक कार्यवाही सम्पादित करने का कष्ट करें:-

- (1) विभिन्न विभागों द्वारा भूमि अधिग्रहण के प्रस्ताव तैयार करते समय इस बात का परीक्षण किया जाय कि क्या भूमि अधिग्रहण अधिनियम 1894(यथासंशोधित) के अधीन भूमि अधिग्रहण करना आवश्यक है अथवा यह भूमि सीधे काश्तकारों से वार्ता कर कय की जा सकती है ? इस विषय में राजस्व विभाग के शासनादेश संख्या-1507/1-13-2004-20(160)/2000 टी०सी०-1 रा०-13, दिनांक 14.09.2004 की ओर आपका ध्यान आकर्षित किया जाता है।
- (2) विभागाध्यक्षों/कार्यालयाध्यक्षों द्वारा भेजे जा रहे भूमि अधिग्रहण के प्रस्ताव में यदि धारा-17, भूमि अधिग्रहण अधिनियम की कार्यवाही आवश्यक हो, तो यह ध्यान रखा जाये कि उसके प्रस्ताव के साथ धारा-17 के प्रयोग किये जाने हेतु औचित्य विस्तार में दिये जाये।
- (3) शासन स्तर पर भूमि अधिग्रहीत करने वाले विभाग द्वारा प्रस्ताव का परीक्षण किये जाते समय पत्रावली पर सहमति देने से पूर्व विचार-विमर्श होना आवश्यक है। धारा-17 की अनुमति देते समय औचित्य एवं कारणों का विश्लेषण भी किया जाना आवश्यक होगा।
- (4) शासन के विभागों के अधीन विभागाध्यक्षों/कार्यालयाध्यक्षों द्वारा प्रस्तुत धारा -17, की आवश्यकता का परीक्षण करते समय उसके आधार विभागीय योजनाओं के अधीन परीक्षित किये जाने चाहिए और प्रत्येक परियोजना के लिये आधार बनाते समय सुसंगत आंकड़ों को भी आख्या में दर्शाया जाना

आधिसूचना के तहत यह सार्वजनिक अधिग्रहण विनिर्देशन के लिये किया जा रहा है, जो उस क्षेत्र में विद्यालय तकनीक से सम्बन्धित भिन्न-भिन्न जमीन के क्षेत्र को दर्शाये जाने चाहिये।

(5) धारा-17 का प्राविधान तात्कालिक आवश्यकता को देखते हुए किया जाता है और इस धारा का उपयोग करते ही जिन भू-स्वामियों की भूमि का अधिग्रहण किया जा रहा है, उनकी सुनवाई के अवसर समाप्त हो जाते हैं। अतः यह आवश्यक है कि इस धारा का उपयोग करते समय यह विशेष रूप से ध्यान रखा जाय कि जब एक ओर भू-स्वामियों को सुनवाई का अवसर नहीं दिया जा रहा है, तो दूसरी ओर विभाग के पास ऐसे पर्याप्त कारण होने चाहिये जो कि इसके लिये आवश्यक हों और प्रोजेक्ट की तात्कालिकता को दर्शाते हों।

(6) धारा-17 का उपयोग प्रोजेक्ट की तात्कालिकता को दर्शाता है और इसका आशय यह लगाया जाता है कि इस प्रोजेक्ट को तुरन्त प्रारम्भ किया जा सकता है। ऐसे प्रोजेक्ट को समयावधि के अन्दर पूर्ण किया जाना आवश्यक है। इसके लिए विभागों द्वारा अनुश्रवण की विशेष व्यवस्था की जानी चाहिये।

(7) धारा-4 की अधिसूचना जारी करने के पश्चात् अधिनियम की धारा-6 के अन्तर्गत अधिसूचना एक वर्ष की समय सीमा के अन्दर निर्गत करने का प्राविधान है। धारा-6 के अन्तर्गत अधिसूचना के निर्गमन की कार्यवाही इस समय सीमा के पूर्व ही किये जाने का प्रयास किया जाना चाहिये।

(8) पॉजेशन मेमो (Possession Memo) भी निर्धारित प्रारूप पर तैयार किया जाना सुनिश्चित किया जायें।

कृपया भूमि अधिग्रहण के मामले में उपरोक्तानुसार कार्यवाही सुनिश्चित करने का कष्ट करें।

भवदीय,

(कोकोसिम्हो)

प्रमुख सचिव।

संख्या एवं दिनांक उपरोक्त।

प्रतिलिपि- निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1- आयुक्त एवं सचिव, राजस्व परिषद उ० प्र० लखनऊ।
- 2- आयुक्त एवं निदेशक, भूमि अधिग्रहण निदेशालय राजस्व परिषद, उ० प्र० लखनऊ।

आज्ञा से,

(विष्णु प्रताप सिंह)
विशेष सचिव।

अन्तर्गत अधिसूचना के तहत यह अधिग्रहण जितनी विस्तारित के लिये किया जा सके है वो उस क्षेत्र में विद्यमान अवकाश रूप से स्थापित किये जाने के उद्देश्य के लिये दर्शाये जाने चाहिए।

(5) धारा-17 का प्राविधान तात्कालिक आवश्यकता को देखते हुए किया जाता है और इस धारा का उपयोग करते ही जिन भू-स्वामियों की भूमि का अधिग्रहण किया जा रहा है, उनकी सुनवाई के अवसर समाप्त हो जाते हैं। अतः यह आवश्यक है कि इस धारा का उपयोग करते समय यह विशेष रूप से ध्यान रखा जाय कि जब एक ओर भू-स्वामियों को सुनवाई का अवसर नहीं दिया जा रहा है, तो दूसरी ओर विभाग के पास ऐसे पर्याप्त कारण होने चाहिए जो कि इसके लिये आवश्यक हों और प्रोजेक्ट की तात्कालिकता को दर्शाते हों।

(6) धारा -17 का उपयोग प्रोजेक्ट की तात्कालिकता को दर्शाता है और इसका आशय यह लगाया जाता है कि इस प्रोजेक्ट को तुरन्त प्रारम्भ किया जा सकता है। ऐसे प्रोजेक्ट को समयावधि के अन्दर पूर्ण किया जाना आवश्यक है। इसके लिए विभागों द्वारा अनुश्रवण की विशेष व्यवस्था की जानी चाहिए।

(7) धारा-4 की अधिसूचना जारी करने के पश्चात् अधिनियम की धारा-6 के अन्तर्गत अधिसूचना एक वर्ष की समय सीमा के अन्दर निर्गत करने का प्राविधान है। धारा-6 के अन्तर्गत अधिसूचना के निर्गमन की कार्यवाही इस समय सीमा के पूर्व ही किये जाने का प्रयास किया जाना चाहिए।

(8) पॉजेशन मेमो (Possession Memo) भी निर्धारित प्रारूप पर तैयार किया जाना सुनिश्चित किया जायें।

कृपया भूमि अधिग्रहण के मामले में उपरोक्तानुसार कार्यवाही सुनिश्चित करने का कष्ट करें।

भवदीय

(के.के.ओ.सिन्हा)

प्रमुख सचिव।

संख्या एवं दिनांक उपरोक्त।

प्रतिलिपि- निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1- आयुक्त एवं सचिव, राजस्व परिषद उ० प्र० लखनऊ।
- 2- आयुक्त एवं निदेशक, भूमि अध्याप्ति निदेशालय राजस्व परिषद, उ० प्र० लखनऊ।

आज्ञा से,

(विष्णु प्रताप सिंह)
विशेष सचिव।

संख्या- 71-1/13-11-7-3(1)/90-59टी.सी.-1

प्रेषक,

विष्णु प्रताप सिंह,
विशेष सचिव,
राजस्व विभाग,
उ०प्र० शासन।

सेवा में,

समस्त प्रमुख सचिव/सचिव,
उत्तर प्रदेश।

राजस्व अनुभाग-13

लखनऊ: दिनांक 04 फरवरी, 2011

विषय- भूमि अर्जन अधिनियम 1894 (यथा संशोधित 1984) की धारा 17 का प्रयोग किये जाने के संबंध में।

महोदय,

उपरोक्त विषय के संबंध में मुझे यह कहने का निदेश हुआ है कि शासनादेश संख्या-1291/1-13-2004-7-3 (1)/90-59 टी.सी.-रा०-13, दिनांक 06 अगस्त, 2004 द्वारा यह निर्णय लिया गया था कि धारा-4 व 6 संपठित धारा-17 भूमि अर्जन अधिनियम की विज्ञप्ति संबंधित प्रशासकीय विभागों द्वारा स्वयं जारी की जाये। यह अनुभव किया गया है कि धारा-4 व 6 संपठित धारा-17 के प्रयोग के संबंध में समस्त प्रशासकीय विभागों को दी गयी शक्ति का प्रयोग युक्तियुक्त रूप से नहीं किया जा रहा है। धारा-17 का प्रयोग अत्यन्त आपवादिक परिस्थितियों में किया जाना अपेक्षित होता है और उसके पूर्व यह देखा जाना आवश्यक होता है कि धारा-17 के उपयोग की अपरिहार्यता है।

2- अस्तु, धारा-17 के युक्ति संगत प्रयोग एवं उसमें एकरूपता सुनिश्चित करने के उद्देश्य से शासन द्वारा यह निर्णय लिया गया है कि 6 विभागों कमशः लोक निर्माण विभाग, आवास एवं शहरी नियोजन विभाग, ऊर्जा विभाग, औद्योगिक विकास विभाग, सिंचाई विभाग एवं नगर विकास विभाग को छोड़कर शेष अन्य समस्त विभागों द्वारा भूमि अध्याप्ति के प्रकरणों में यदि धारा-17 का प्रयोग किया जाना प्रस्तावित हो तो ऐसे समस्त प्रस्ताव कलेक्टर को उपलब्ध कराये जायेंगे और तदोपरान्त भूमि अध्याप्ति निदेशालय, राजस्व परिषद उत्तर प्रदेश, लखनऊ के माध्यम से शासन के संबंधित प्रशासकीय विभागों को उपलब्ध कराये जायेंगे।

समस्त प्रशासकीय विभाग ऐसे प्रस्तावों जिनमें धारा-4 (1) एवं धारा-6 (1) संपादित धारा-17 का प्रयोग किया जाना प्रस्तावित हो उन प्रकरणों में ऐसी विज्ञप्ति निर्गत करने से पूर्व धारा-17 के प्रयोग के औचित्य के संबंध में शासन के राजस्व विभाग का पूर्वानुमोदन अनिवार्य रूप से प्राप्त करेंगे। ऐसे भू अर्जन प्रस्तावों का परीक्षण राजस्व विभाग द्वारा समय-समय पर निर्गत शारानादेशों के अनुरूप किया जायेगा जिसमें शासनादेश संख्या-1548/1-13-2002-रा0-13, दिनांक 30 सितम्बर, 2002 एवं संख्या- 1666/1-13-2010-18-1(95)/10, दिनांक 01 दिसम्बर, 2010 तथा परिषद के आदेश संख्या- 2623/10(भू0310)/93 अ/04, दिनांक 07 दिसम्बर, 2004 विशेष रूप से उल्लेखनीय हैं। प्रशासकीय विभाग द्वारा उपरोक्तानुसार समस्त अभिलेखों सहित ऐसे भू अर्जन प्रस्तावों के साथ धारा-17 का प्रयोग किये जाने के औचित्य के संबंध में एक विस्तृत टिप्पणी तीन प्रतियों में अलग से पत्रावली में प्रस्तुत किया जाना भी अनिवार्य होगा।

3- उपरोक्त प्रस्तर-2 में उल्लिखित 6 विभागों द्वारा धारा-17 का प्रयोग राजस्व विभाग एवं राजस्व परिषद द्वारा समय-समय पर निर्गत शासनादेशों/आदेशों के परिप्रेक्ष्य में भलीभाँति विचार करने के उपरान्त अपने स्तर से ही पूर्ववत् किया जायेगा।

कृपया उपरोक्त का कड़ाई से अनुपालन सुनिश्चित करने का कष्ट करें।

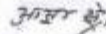
भवदीय,


(विष्णु प्रताप सिंह)
विशेष सचिव।

संख्या 71(1)-1/13-11-7-3(1)/90-59टी.सी.-1/तददिनांकित।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित-

1. आयुक्त एवं निदेशक, भूमि अध्याप्ति निदेशालय, उत्तर प्रदेश लखनऊ।
2. शासन के समस्त अनुभाग।
3. गार्ड फाइल।



(भवेश रंजन)
अनु सचिव

संख्या-137/1-13-10-20(29)/2004

प्रोत्तर,
कै० कै० सिन्हा,
प्रमुख सचिव,
उ० प्र० शासन।

सेवा में,

- (1) समस्त प्रमुख सचिव/सचिव,
उत्तर प्रदेश शासन।
- (2) समस्त विभागप्रमुख,
उत्तर प्रदेश।
- (3) समस्त मण्डलायुक्त/जिलाधिकारी,
उत्तर प्रदेश।

संज्ञक अनुभाग-13

लखनऊ - दिनांक-03 सितम्बर, 2010

विषय-भूमि अधिग्रहण के मामलों में परियोजना से प्रभावित परिवारों के पुनर्वासन एवं पुनर्वास के संबंध में।

महोदय,

प्रदेश में भूमि अधिग्रहण के मामलों में परियोजना से प्रभावित परिवारों के पुनर्वास एवं पुनर्वासन से संबंधित शासनादेश संख्या-1321/1-13-04-20(20)/2004-30-13 दिनांक-10 अगस्त, 2004 एवं संख्या-361/1-13-2005-20(29)/2004-30-13 दिनांक-28 फरवरी, 2008 तथा शासनादेश संख्या-1252/1-13-10-20(29)/2004 दिनांक-17 अगस्त, 2010 के अनुक्रम में मुझे यह कहने का निर्देश हुआ है कि प्रदेश के सर्वांगीण विकास हेतु विभिन्न विकास परियोजना के लिए भूमि अधिग्रहण आदि के फलस्वरूप प्रभावित कुशल के उपयुक्त पुनर्वास एवं पुनर्वासन हेतु पूर्व अनुम्य सुविधाओं के अतिरिक्त निम्नलिखित सुविधाएं दिये जाने का निर्णय लिया गया है-

(1) वार्षिकी (Annuity)

- (i) प्रत्येक किसान, जिसकी भूमि अधिग्रहीत की जा रही है, को 33 साल के लिए रु० 20,000.00 प्रति एकड़ प्रति वर्ष की दर से वार्षिकी (Annuity) दी जायेगी, जो भूमि प्रतिफल के अतिरिक्त होगी।

- 2
- (ii) ₹ 20,000.00 प्रति एकड़ प्रति वर्ष की वार्षिकी (Annuity) पर प्रति एकड़ प्रति वर्ष ₹ 800.00 की निश्चित दर से वृद्धि की जायेगी, जो प्रत्येक वर्ष जुलाई माह में देय होगी।
- (iii) यदि कोई किसान वार्षिकी (Annuity) नहीं लेना चाहता है तो उसे एकमुश्त ₹ 2,40,000.00 प्रति एकड़ की दर से पुनर्वास अनुदान दिया जायेगा।
- (iv) कम्पनी प्रायोज्य हेतु भूमि अधिग्रहण की स्थिति में पुनर्वास अनुदान की एकमुश्त धनराशि में से 25 प्रतिशत के समतुल्य कम्पनी के शेयर का विकल्प किसानों को उपलब्ध होगा। ये शेयर, भूमि अधिग्रहण के धारा 17 के विधिवि प्रकाशन की तिथि अथवा करार की तिथि, जो भी बाद में हो, को शेयर के बाजार मूल्य के आधार पर कम्पनी द्वारा देय होगी। यदि कम्पनी द्वारा भूमि अधिग्रहण के पश्चात् इनीशियल पब्लिक ऑफर (I.P.O.) लाया जाता है, तो कम्पनी द्वारा फेश वैल्यू (Face value) पर एकमुश्त पुनर्वास अनुदान के 25 प्रतिशत के समतुल्य धनराशि का शेयर का आवंटन विकल्प देने वाले किसानों को किया जायेगा।
- (2) यदि भूमि अर्जन किसी प्राधिकरण के प्रयोजन हेतु किया जाता है, तो पुनर्वास एवं पुनर्स्थापन पर होने वाला सारा व्यय भूखण्ड की कीमत में जोड़ दिया जायेगा, जिसे निर्धारित ब्याज दर से जोड़ते हुए जब कभी भूखण्ड किसी शासकीय संस्था/निजी संस्था अथवा व्यक्तियों को आवंटित किया जाता है, तो उसे प्राधिकरण द्वारा लिया जायेगा। इसी प्रकार यदि भूमि अर्जन किसी कम्पनी के लिए किया जाता है तो पुनर्वास एवं पुनर्स्थापन पर होने वाला समस्त व्यय सम्बन्धित कम्पनी से लिया जायेगा।
- (3) जिन परियोजनाओं में लैंड फॉर डेवलपमेंट हेतु भूमि अधिग्रहीत की जा रही है, उन्हें प्रभावित मूल कारस्तकारों को अधिग्रहीत भूमि की 7 प्रतिशत भूमि आवासीय प्रयोजन हेतु अर्जन की लागत एवं विकास शुल्क लेकर दी जायेगी। तत्त आवंटित भूखण्ड का क्षेत्रफल न्यूनतम 120 वर्ग मीटर तथा अधिकतम क्षेत्रफल संबंधित प्राधिकरण द्वारा निर्धारित किया जाएगा।

- 3
- (4) प्राधिकरण द्वारा अधिग्रहीत भूमि पर आवासीय योजना क्रियान्वित किये जाने की स्थिति में अधिग्रहण से प्रभावित कृषकों को मूलमूल्यों के आवंटन में 17.5 प्रतिशत आरक्षण भी प्रदान किया जायेगा।
 - (5) लैण्ड फॉर डेवलपमेंट हेतु भूमि अधिग्रहण से पूर्णतः चुनिनीष्ट हो रहे परिवारों के एक सदस्य को उसकी योग्यता के अनुरूप कन्शेन्सनायर कम्पनी में सेवायोजित कराया जायेगा।
 - (6) प्राधिकरण/कम्पनी प्रायोज्य से अधिग्रहण की स्थिति में अधिग्रहण से प्रभावित गाँवों में मूलभूत सामाजिक अस्थापना सुविधाओं के विकास का कार्य कम्पनी तथा सम्बन्धित प्राधिकरण द्वारा कराया जायेगा।
- 2- यह आदेश राज्य सरकार द्वारा सारान के विभिन्न विभागों अथवा राज्य सरकार के सचिवों/प्रतिष्ठानों एवं संस्थाओं आदि के लिये अधिग्रहीत की गयी भूमि के संरक्ष में ही लागू होगा और प्रतिष्ठा (Defence) के लिये अधिग्रहीत भूमि के संरक्ष में लागू नहीं होगा।
 - 3- यह आदेश तत्काल प्रभाव से लागू रहेगा।

भवदीय
(के.के. सिन्हा)
प्रमुख सचिव।

संख्या- 13.43 (1)/1-13-10-20(28)/2004 तद् दिनांक।

प्रतिलिपि निम्नलिखित को सूचनाएँ एवं आवश्यक कार्यवाही हेतु प्रेषित-

- 1- आयुक्त एवं सचिव, राजस्व परिषद्, उत्तर प्रदेश, लखनऊ।
- 2- निदेशक, भूमि अधिग्रहण निदेशालय, राजस्व परिषद्, उत्तर प्रदेश, लखनऊ।

आज्ञा से
(विष्णु प्रताप सिंह)
विशेष सचिव।

(English Translation)
(Hindi Version is the Authorized Version)

NO.632/1-13-11-20(29)2004

From

K.K.Sinha,
Principal Secretary,
Govt. of Uttar Pradesh.

To,

1. All Principal Secretaries/Secretaries, Govt. of Uttar Pradesh.
2. All Head of the Deptt. Uttar Pradesh.
3. All Commissioners/Distt. Magistrates, Uttar Pradesh.

Revenue Section-13

Lko.dt.02 June,2011

Sir,

Whereas on one hand the state government is committed to the economic development of the state, on the other hand it has been the clear policy of the government that the land owners whose land is acquired for the projects related to economic and social development, they should be given adequate compensation and other facilities their interest be protected and they get the adequate benefits of development.

The general policy for taking land for all purpose will be that the land be purchased directly from the land owners on the basis of mutual understanding/agreement arrived at between the land owners & the acquisition bodies by following the relevant rules/orders relating to the purchase of land. In this connection I have been directed to state that with a view to implement this specific vision of the state government the following policy is being laid down for acquiring land for various schemes.

- 1- For implementation of Infrastructure Projects in Public Sector viz:- State highways, canal, power and so on the process of land acquisition would be initiated by following the Rules & Regulations as provided in the Land Acquisition Act 1894, but the compensation of land would be fixed by mutual consent as per the provisions of The Uttar Pradesh Land Acquisition (Determination of Compensation and Declaration of Award by Agreement) Rules, 1997. Those land owners whose land is acquired for these projects would be given all the benefits of the Rehabilitation & Resettlement Policy 2010 (as amended) of the Government.

2- Local Bodies/ Undertakings like Development Authorities, Industrial Development Authorities, Housing Development Boards etc. acquire land for projects in discharge of their legal responsibility of planned development in which developed land is allotted to public for their residential needs, to small units in service or industrial sector and for community facilities. The land for such projects will be acquired under the provisions of Land Acquisition Act 1894. After the issue of notification under Section-4 the following two options shall be available to the land owners with a view to protecting their rights:-

a) The compensation shall be determined by the Governing Board of the Public Undertaking keeping liberal view and with mutual consent under Settlement Rules 1997 (Determination of Compensation and Declaration of Award by Agreement Rules, 1997). In addition all the benefits available under Resettlement and Rehabilitation Policy shall also be available to all the affected farmers.

or

b) 16% of the total area of the acquired land shall, after development, be given back free of cost. Such land shall be transferable. 50% of the developed land given to the land owner shall be for residential use and 50% for non-residential use (like industrial, institutional, commercial or mixed use). The concerned body/Undertaking or Authority shall itself determine the relative percentage of non-residential use. The land owner shall get the map of project construction approved as per rules.

The land owner shall have the option of retaining part of the 16% developed land given to him and to obtain cash compensation for the remaining land on the basis of mutual agreement. The rates of cash compensation shall be declared by the acquiring body at the beginning of the project.

The land given to land owner shall be free from development fee or land use change fee due to the development authority.

In addition to above package determined by the mutual consent the following benefits shall also be available to land owners:-

(i) Annuity

a) Every land owner, whose land has been acquired shall be given annuity @ Rs.23000/= per acre per year in addition to compensation amount.

b) The amount of annuity of Rs.23000/= shall be increased by Rs.800/= per acre every year in the month of July.

c) The Land owner, who does not want to take annuity, shall be given Rs.2,76,000/= per acre in lump sum as rehabilitation subsidy.

d) In case of land acquired for a company the land owner shall have option to obtain shares of the company equivalent to 25% amount of the lump sum subsidy. Such shares shall be allotted at the market value prevailing on the date of publication of notification under section-6 of the Land Acquisition Act or date of agreement, whichever is later.

If the company issues Initial Public Offer of shares after the date of land acquisition, the option of allotment of shares equivalent to 25% of the amount of lump sum at face value shall be given to land owners.

(ii). Each Family which becomes landless by implementation of project shall be given 40 sq.mtr. developed residential land free of cost.

(iii) Each family affected by project, whose total land has been acquired, shall be given financial help equivalent to the minimum agricultural wages for 5 years as compensation for livelihood.

(iv) Each family whose total land has not been acquired but which has become marginal farmers, due to implementation of project shall be given financial help equal to minimum agriculture wages equivalent to 500 days as compensation for livelihood.

(v) Each family which has become small farmer by acquisition of land shall be given financial help equivalent to minimum agricultural wages for 375 days.

(vi) Each family of agricultural labourer or non agricultural labourer affected by the project shall be given one time financial help equal to minimum agricultural wages of 625 days.

(vii) Each family displaced by the project shall be given compensation for livelihood equal to minimum agricultural wages of 250 days.

(viii) Land owners of hereditary land shall continue to get additional facilities according to prevailing practice.

3- Where land is allotted for projects in the private sectors outside the master plan area for planned industrial/urban development for public use in residential, commercial, to medium or heavy industry, in service or infrastructure sector or where the bulk allotment of land is propose in private sector the following procedure shall be followed for acquisition of land:-

i) The Govt. shall, after examination of the project, issue notification under section-4 of Land Acquisition Act for total land of the project.

ii) The compensation package shall be determined by mutual agreement between developer and the land owner at the village itself and the Collector of the District shall act as a facilitator. The land, instead of being acquired, shall be directly transferred by the land owner to the developer of the project.

iii) The package shall be prepared only after consent of at least 80% of the land owners is obtained. Under this scheme the following 2 options shall be available:-

a) 16% of the total area of the acquired land shall, after development, be given to the land owner free of cost. Such land shall be transferable. 50% of the developed land given to the land owner shall be for residential use and 50% for non-residential use (like industrial, institutional, commercial or mixed use). The concerned body undertaking or authority shall itself determined the relative percentage of non-residential use. The land owner shall get the map of project construction approved as per rules.

b) The land owner shall have the option of retaining part of the 16% developed land given to him and to obtain cash compensation for the remaining land on the basis of mutual agreement. The rates of cash compensation shall be declared by the acquiring body at the beginning of the project. Where there is no authority, the District Magistrate of the District will fix the rate of compensation in cash in respect of infrastructure projects. 50% of the total area of developed land given would be for residential land use and 50% would be for Non residential land use such as industrial, Institutional, commercial or mixed land use if permissible) The policy relating to the fixation of permissible limits in various non residential land uses would be framed by the concerned body/organization authority itself. It would be mandatory for the land owner who has obtained the land, as aforesaid, to get the map sanctioned for development/construction on it, as per rules.

The land owner who has been given the land shall be exempted from paying the development fee or the fee for change of land use, to the developer.

Apart from the above package fixed by mutual consent the following benefits would also be admissible to the land owners:-

Annuity

a) Every land owner whose land has been acquired shall be paid an annuity of Rs.23,000/- per acre per year for a period of 33 years which would be apart from the payable compensation

b) A fixed increase of Rs.800/- per acre per year would be made on the annuity of Rs.23,000/- per acre per year which would be payable every year in the month of July.

c) If any land owner does not wish to take the annuity then he shall be paid a fixed sum of Rs.2,76,000/- as rehabilitation grant.

d) In case of land acquisition for the purpose of a company, the land owners will have the option of taking the shares of the company amounting to 25% of rehabilitation grant. These shares would be given by the company on the basis of market value of the share prevailing at the time of publication of notification under section 6 of the Land Acquisition Act or date of agreement, whichever is later. If, after land acquisition, the Company brings an initial public offer then the company shall allot shares on the face value equal to an amount of 25% of the rehabilitation grant to the land owners who have exercised the option.

ii) If, as a result of transfer of land in favour of the developer any family becomes totally landless then in that case one member of the family would be given job as per his qualification in the developer company.

iii) Those families affected by the project and having agricultural land in the area and whose total land has been transferred would be paid an amount equal to the value of 5 years of minimum agricultural wages in lump sum as livelihood compensation.

iv) All those families having agriculture land in the affected area and whose total land has not been acquired and who as a result of land acquisition have become marginal farmers would be given financial assistance equal to an amount of 500 days of minimum agricultural wages.

v) All families affected by the project having agricultural land in the affected area and who as a result of land acquisition have become small farmers will be given financial assistance equal to an amount of 375 days of minimum agricultural wages.

vi) All project affected families falling under the category of agricultural labourer or non agricultural labourer would be given financial assistance equivalent to 625 days of minimum agricultural wages, in lump sum.

vii) All families affected by the project and displaced as a result of it would be given an additional amount equivalent to 250 days of minimum agricultural wages in lump sum as livelihood compensation.

viii) All ancestral land owners in Industrial Development Authority would continue to receive additional benefits as per established procedure.

4- The land of all those remaining farmers who do not agree to take the above package would be acquired by adopting the process as provided under the Land Acquisition Act 1894

5- If, in any project less than 80% of the total affected land owners give their consent, then in that case the project would be reconsidered.

4- (i) A Kisan Bhawan would be constructed by the developer agency of the project at its own cost in every village affected by land acquisition so that the land owners can have a building for their community requirements.

(ii) An scheme of at least one model school (up to class 8) with play ground would be started in the project area & the building for it would be constructed by the developer of the project at its cost for providing education opportunities to the children of the land owners and landless labourers, living below poverty line, who are affected by the land acquisition.

5- (i) The developed land given to the land owners as compensation shall be exempted from stamp duty and registration fee payable on registration.

(ii) If the affected land owners purchase any agricultural land in the State within a period of one year from the date of receiving the compensation, then in that case, they shall be exempted from paying the stamp duty and registration fee on its registration up to the value of compensation received.

6- Annuity of Rs.23000/= per acre per year would be payable in place of Rs.20000/= per acre per year as provided in G.O.No.-1307/1-13-10-20(29)2004 dt. 03 Sept.2010 relating to Rehabilitation and Resettlement Policy and annual increase of Rs.800/= in place of Rs.600/= would also be payable and a lump sum payment of Rs.276000/= in place of Rs.240000/= would also be payable.

7- In this connection I have also been directed to state that the provisions of the earlier G.O.s relating to Land Acquisition & Rehabilitation & Resettlement policy shall be deemed to be amended to this extent.

8- These orders shall come into force at once.

Yours faithfully,

(K K Sinha)
Principal Secretary

No.-632 (1)/EK-13-2011 of even date

CC- to following for information and necessary action:

- 1- Commissioner and Secretary, Board of Revenue, U.P. Lucknow.
- 2- Director, Land acquisition Directorate, Board of Revenue, U.P. Lucknow.
- 3- Director, Information and Public Relations, U.P. Lucknow.
- 4- Sectional Order Book.

By Order,

(Vishnu Pratap Singh)
Special Secretary