

# Resettlement Framework

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June 2013

## India: Karnataka Integrated and Sustainable Water Resources Management Investment Program

Prepared by Karnataka Neeravari Nigam Limited for the Asian Development Bank.

## **CURRENCY EQUIVALENTS**

(as of 1 May 2013)

Currency Unit	–	Indian rupees (Re/Rs)
Re1.00	–	\$0.01864
\$1.00	–	Rs53.64500

## **ABBREVIATIONS**

ADB	Asian Development Bank
ADB SPS	Asian Development Bank Safeguard Policy Statement
APs	Affected Persons
CAD	Command Area Development
CADA	Command Area Development Authority
CCA	Cultivable Command Area
DPs	Displaced Person
GoI	Government of India
INR	Indian National Rupee
IPPF	Indigenous Peoples Planning Framework
IWRM	Integrated Water Resources Management
KISWRMIP	Karnataka Integrated and Sustainable Water Resources Management Investment Program
KNNL	Karnataka Neeravari Nigam Limited
LAA 1894 or LAA	Land Acquisition Act, 1894
MFF	Multitranchise Financing Facility
MoU	Memorandum of Understanding
NRRP 2007 or NRRP	National Rehabilitation and Resettlement Policy, 2007
O&M	Operations and Maintenance
OFD	On-Farm Development
PMU	Project Management Unit
PPP	Public Private Participation
R&R	Resettlement & Rehabilitation
RF	Resettlement Framework
RoW	Right of Way
RP	Resettlement Plan
RWS	Rural Water Supply
SGoK	State Government of Karnataka
SC	Scheduled Caste
SST	Social Support Team
ST	Scheduled Tribe
TA	Technical Assistance
TLBC	Tungabhadra Left Bank Canal
TMC	Trillion Meter Cube
WRD	Water Resources Department
WSS	Water Supply & Sanitation
WUCs	Water User Cooperative Societies

## NOTES

- (i) The fiscal year (FY) of the Governments of India and Karnataka and their agencies ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2008 ends on 31 March 2008.
- (ii) In this report, "\$" refers to US dollars.

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## EXECUTIVE SUMMARY

1. The Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP) has been envisaged as a Multi-tranche Financing Facility (MFF). The Program is designed to include the Institutional Strengthening for IWRM including the Nigams CADA and WUCs, and modernisation of management of irrigation sub-projects. The four irrigation sub-projects proposed to be included for modernisation of irrigation system under the program are: (i) Gondhi Irrigation system, which is a sub-area of the Bhadra irrigation system (Tranche 1), (ii) Vijayanagara (VJN, Tranche 2) and (iii) part of Tungabhadra Left Bank Canal (TLBC, Tranche 2 and 3) and (iv) Bhadra Irrigation System (with interventions limited to putting up the flow measurement devices). The components proposed as part of the modernisation works include (i) Flow measurement with Telemetry for Key Irrigation Systems, (ii) WUCs and Agricultural Development and (iii) the canal improvement works like lining, improvement of control structures etc.

2. An assessment for involuntary resettlement impacts has been made for Gondhi, Vijay Nagar and TLBC Irrigation/ Canal Systems based on the feedback from the WRD and CADA officials about their experience of implementing similar interventions as part of their on-going projects, observational field visits and consultations with the communities to validate and elicit their views on the involuntary resettlement issues. The key findings from the assessment are:

- (i) the interventions under Tranche-1 and subsequent tranches are planned within the RoW;
- (ii) the other interventions that could be planned for subsequent tranches include strengthening of the existing linkages between the different canal systems within the sub-basin including improvements in the tanks/ ponds. Some of these ponds/ tanks areas have been encroached upon for the purpose of farming. In other cases changes to dam operation could increase water levels and therefore result in peripheral flooding. These could potentially have certain impacts on the livelihood issues. The technical feasibility for these is yet to be established and hence it is difficult to assess the likely impacts in terms of the land requirement. However, any such interventions are not envisaged in Tranche-1 as per the investment plan proposed for Tranche-1.
- (iii) A very minimal extent of temporary impacts may be involved, especially if there are establishment of construction camps, although this is not envisaged at this stage and would be confirmed with detailed planning as there are existing construction camp sites available in the command area.
- (iv) Similarly, as part of the overall IWRM approach the possibilities of on-line storage systems and the night storage reservoirs, if found technically feasible, after the detailed assessments are made during Tranche-1, the likely impacts in terms of land requirements and involuntary resettlement would need to be established. The costing for Tranche-1 has not considered any investment towards on-line storage and night storage reservoirs.

3. The assessment of the sub-projects under consideration with regard to the projects interventions envisaged as of now and the ground level situation clearly reveals that direct resettlement impacts are unlikely. Given the overall nature of the project (modernisation of canal works within the RoW of the canal) and set of interventions envisaged under Tranche-1, no action is needed with regard to Involuntary Resettlement Safeguards for Tranche-1. However based on the final set of design interventions which would be evolved and planned for subsequent tranches (especially if the night storage reservoirs or online storage reservoirs are planned), the project could require preparation of Resettlement Plans (RPs) and such impacts

can be assessed only once the technical feasibility for these interventions is established and design interventions are firmed up for the subsequent tranches. In this context, a Resettlement Framework (RF) is required to guide for the MFF the involuntary resettlement safeguards that will be followed for the subsequent Tranches. All future sub-projects will be screened for involuntary resettlement safeguards with the following objectives:

- (i) to avoid involuntary resettlement wherever possible;
- (ii) to minimize involuntary resettlement by exploring project and design alternatives;
- (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and
- (iv) to improve the standards of living of the displaced poor and other vulnerable groups.

4. The RF identifies the broad scope of the Program and outlines the policy, procedures and institutional requirements for the preparation and implementation of subproject RPs. The Executing Agency (EA), Karnataka Neeravari Nigam Limited (KNNL) of the SGOK, will be responsible for conducting the social assessments and formulating RPs for subsequent sub-projects, where involuntary resettlement impacts are expected, as per the procedures outlined in this RF. The draft RPs will be disclosed to the Affected Persons (APs) in local language (Kannada) and submitted to ADB for review and approval, and public disclosure prior to the award of civil works contracts. Compensation, relocation and rehabilitation processes will be completed prior to the commencement of any project-related construction activities. The review of the provisions of the LAA and NRRP and its comparison with the Policy Principles for involuntary resettlement laid down under ADB SPS 2009 has been made and it can be concluded that the provisions made under the LAA supplemented with NRRP 2007 broadly fulfill the requirements of Involuntary Resettlement Safeguards under ADB SPS with a few minor gaps, including the cut-off date for DPs without title to land and the compensation at replacement cost, which have been addressed.

5. Involuntary resettlement, including both physical displacement and economic displacement, will be avoided or minimized by identifying possible alternative project designs and appropriate social, economic, operational and engineering solutions that have the least impact on the population in the Project area. Where involuntary resettlement is unavoidable for the wider gains to the larger community and achievement of IWRM objectives, the persons affected by the project will be offered assistance under the program for improving or at least restoring their livelihoods, income, and standard of living.

6. The populations/ persons affected by the Project are defined as those who may stand to lose, as a consequence of the Project, all or part of their assets which includes homes, lands, commercial properties, tenancies, income earning opportunities, social and cultural activities and infrastructure together with any other losses that may be identified in the resettlement planning exercise. Neither lack of legal rights to the assets lost, tenure status, nor social or economic status will bar the DP from entitlement to the compensation and rehabilitation objectives and measures outlined in the Framework. All DPs will be entitled to be compensated as per the principle of replacement of affected assets, incomes and businesses; all severely affected persons will also be provided with transitional assistance and income restoration and other rehabilitation assistance which will be sufficient to improve or at least restore their pre-project living standards, income levels and productive capacity. The R&R assistance shall be payable as per the entitlement matrix for all APs and shall be applicable for all future subprojects. In the event of any population relocation, efforts will be made to maintain the physically displaced persons existing social and cultural institutions to the greatest extent possible.

7. For the purpose of the RF, the vulnerability and DPs without legal title to land have been defined as:

- (i) The Vulnerable DPs will include the poorest/ below poverty line, SCs and STs, female headed households, the disabled and elderly with no means of support, landless and those without a title to land, marginal farmers or those who become marginal as a result of acquisition and these will be assisted to mitigate their hardships and improve their livelihoods.
- (ii) The DPs without legal title to land will be classified in two categories, (i) Squatters and (ii) Encroachers. Squatters are those that are landless or without title to land and occupy public land for shelter and/or for carrying out their livelihoods. Encroacher is used here to denote illegal extension into public property by a person who is a legal titleholder of his property. The person is an encroacher on the portion of the property occupied to which the person does not hold legal title.

8. All future sub-projects will be screened for involuntary resettlement impacts from as early as planning stage for the sub-project and social impact assessment exercise will be taken up for each of the sub-projects. The socioeconomic survey(s) and a census, with appropriate socioeconomic baseline data to identify all persons who will be displaced by the project and to assess the project's socioeconomic impacts on them will be carried out for all sub-projects under the Program. If any sub-project in future tranches involve involuntary resettlement impacts, the RPs will be prepared with an objective to ensure that livelihoods and standards of living of displaced persons are improved, or at least restored to pre-project (physical and/or economic) levels and that the standards of living of the displaced poor and other vulnerable groups are improved, not merely restored, by providing adequate housing, security of land tenure and steady income and livelihood sources.

9. All RPs will be prepared on the basis of social impact assessment and through meaningful consultation with the affected persons and necessary budget allocations will be made available for RP preparation and implementation. During the identification of the impacts of resettlement and resettlement planning, and implementation, adequate attention will be paid to gender concerns, including specific measures addressing the need of female headed households, gender-inclusive consultation, information disclosure, and grievance mechanisms, to ensure that both men and women receive adequate and appropriate compensation for their lost property and resettlement assistance, if required, as well as assistance to restore and improve their incomes and living standards.

10. The RPs will include detailed measures for income restoration and livelihood improvement of displaced persons in order to ensure that Income sources and livelihoods affected by project activities will be restored to atleast pre-project levels, and every effort will be made to improve the incomes of displaced persons so that they can benefit from the project, especially for the vulnerable groups. The resettlement plan will specify the income and livelihoods restoration strategy, the institutional arrangements, the monitoring and reporting framework, the budget, and the time-bound implementation schedule. The RPs will be finalized by updating the census and inventories of loss of assets after the detailed engineering designs are completed. The entitlement matrix of the resettlement plan will be updated, if required, to reflect the relevant changes without lowering the entitlements in the entitlement matrix during the revision/ finalization of the RPs. Projects with significant involuntary resettlement impacts will be provided with adequate contingency funds to address involuntary resettlement impacts that are identified during project implementation. The DPs will be consulted and informed about

their entitlements and relocation options. The RPs including any revisions in RPs/ supplementary RPs will be submitted to ADB for review before any contracts are awarded.

11. Based on the likely impacts, the Displaced Persons have been classified for different types for potential losses and accordingly their entitlements have been defined. The entitlements for DPs have been classified on the basis of the likely impacts and considered (i) DPs whose land is affected (ii) DPs whose structures are affected (iii) DPs with other assets affected (iv) DPs losing income or livelihoods (v) Vulnerable DPs including IPs, for the purpose of defining the entitlements under the entitlement matrix. In addition, the provisions have also been defined to compensate the APs losing access to common property resources as part of the entitlement matrix. All the DPs will be compensated on the principle of replacement cost for which the methodology has been defined in the RF.

12. Compensation and resettlement and rehabilitation assistance for each category of DP are based on the type and level of loss or impact. The Project Entitlement Matrix is provided as part of the RF. It has been prepared on the basis of expected impacts and the minimum requirements to be met for various types of losses, as per the NRRP. It identifies the categories of impact and shows the entitlements for each type of loss. If additional or unforeseen impacts are identified during the detail design and/or implementation phases then such losses will be included in a revised entitlement matrix as well as in the RPs and addressed as per the general principles defined for the Project as mutually agreed between the ADB and SGoK.

13. Resettlement Plan, if any, will be prepared and implemented in close consultation with the stakeholders and will involve focus group discussion (FGD) and meetings, particularly with the affected households. In addition, a Public Consultation and Disclosure Plan will be prepared for each of the subproject. The report of this disclosure giving detail of date, location will be shared with ADB.

14. The grievance redress mechanism would comprise three stages/ levels and the WUCs/ PIO will inform the DPs/ APs about the provisions of grievance redress mechanism as part of the consultations and disclosure. A comprehensive record will be maintained by EA for all grievance proceedings organized at different stages. However, at any stage of the GRM, an aggrieved person will be free to access the country's legal system and that this is not conditional upon the perceived unsatisfactory outcome of the GRM.

15. KNNL is the Executing Agency (EA) for the Program and will be responsible for overall coordination and financing of the activities related to involuntary resettlement and ensuring adequate resettlement budgets to PMU for the resettlement safeguards. The Project Management Unit (PMU) to be set-up will have the primary responsibility for the overall coordination, planning and implementation of the RPs. The implementation of resettlement plans will be taken up with the involvement of WUCs with the support and guidance from PIOs and SSTs. The staff at the PIO level, SSTs and WUCs will be provided with the training for implementation of the RP, wherever applicable.

16. Detailed budget estimates for RP, if any, will be prepared by the EA through the PMU. The budget shall include: (i) detailed costs of land acquisition, relocation, and livelihood and income restoration and improvement; (ii) costs for carrying out meaningful consultations through the resettlement plan implementation and the grievance redress mechanism (ii) source of funding; (iii) administrative costs (iv) monitoring cost (v) cost of hiring consultants (vi) arrangement for approval, and the flow of funds and contingency arrangements. All land acquisition, compensation, relocation and rehabilitation, administrative, monitoring and



consultation costs, consultant costs, income and livelihood restoration costs will form the part of the overall financial estimates for the sub-project. All land acquisition and resettlement costs will be borne by the EA and it will ensure timely disbursement of funds for RP implementation. It is proposed that the SGOK will provide the entire fund for land acquisition and resettlement for which a separate budget head for the Program specific Land Acquisition and Resettlement shall be created with a provision of token amount in the Budget of the State Government to ensure that the resettlement plans are implemented timely. The consent of SGOK is to be sought in this regard.

17. Monitoring of IR activities will be undertaken by the Project Implementation Offices (PIO). The PMU will prepare semi-annual monitoring reports describing the progress of the implementation of resettlement activities and any compliance issues and submit these reports to ADB. For projects with significant involuntary resettlement impacts, if any, identified during subsequent tranches, the EA will retain qualified and experienced external experts or qualified NGOs to verify the monitoring information. The external experts will be responsible for advising on safeguard compliance issues, and conducting a one-time Social Impact Evaluation, at least six months following the completion of the Tranche.



## I. INTRODUCTION

18. The Government of India (GoI), State Government of Karnataka (SGOK) and ADB agreed to prepare the Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP). The KISWRMP is targeted to improve water resources management for enhanced access and security of water supply in the selected river basin in Karnataka. The Program comprises three major outputs addressing (a) support for strengthening of policy and institutional framework; (b) modernisation of management of irrigation projects; and (c) operationalisation of efficient program management systems. The Outputs from the project irrigation component are:

- (i) Irrigation infrastructure for about 260,000 ha modernised to enable more efficient and equitable operation
- (ii) Operation of about 360,000 ha improved by provision of flow measurement and telemetry to provide real-time knowledge of operation
- (iii) Capacity building of system operators and farmers in operation and maintenance to support the improvements in efficiency and equity in water use.

19. KISWRMIP is proposed to be financed through a Multi-tranche Financing Facility (MFF) so as to enable flexibility in investment decisions and timing based on the needs and constraints of the project, instead of a precise definition of investments up front as conventionally required. The Program is proposed to be implemented over 3 Tranches of 4 years each with one year overlapping period amongst preceding and succeeding tranche, thereby making the overall duration of ten years for the program. The irrigation modernisation component contains four main sub-projects:

- (i) Modernisation of the Gondhi irrigation system (about 4,600ha) under Tranche-1
- (ii) Modernisation of the Vijayanagara canal system (about 11,000 ha) under Tranche-2
- (iii) Modernisation of the Tungabhadra left bank canal system (about 244,000 ha) under Tranche-2 and Tranche-3
- (iv) Provision of flow measurement and telemetry on the main irrigation systems in the sub-basin

20. The modernization of the Gondhi Irrigation System under Tranche-1 envisages upgrading this system covering an area of about 4,600ha addressing the canal system infrastructure upgrading and command area development. The key intervention envisaged under the system include:

- (i) Improvement of canals including provision of canal lining to suit future water delivery requirements. Lining may be a combination of slip formed channel and large precast units in order to minimize the duration of canal closures
  - 74.6 km of Gondhi Right Bank and 14.50 km of Gondhi Left Bank subproject main canal lined
- (ii) Repair / replacement of all canal structures to support the future operational objectives.
- (iii) Modification of current on-line storage where feasible to become actively managed off-line storage and provision of night storage reservoirs where land can be made available.
- (iv) Command area development works (including low pressure gravity-supplied pipe distribution where technically feasible and agreeable to the farmers)
  - 4,600 ha provided with Command Area Development works.

21. A detailed note on the Program design and the sub-projects is enclosed as Annexure-1 to this Appendix. Amongst the envisaged program components, irrigation modernization and command area development components have been examined from the perspective of involuntary resettlement.

22. An assessment for involuntary resettlement impacts has been made for Gondhi, Vijay Nagar and TLBC Irrigation/ Canal Systems based on the feedback from the WRD and CADA officials about their experience of implementing similar interventions as part of their on-going projects, observational field visits and consultations with the communities to validate and elicit their views on the involuntary resettlement issues. A report on the assessment of resettlement impacts is enclosed as Annexure-2 to this Appendix. The outcomes of the public consultation meetings organised under the TA are summarised and enclosed as Annexure-3 to this Appendix. The key findings from the assessment are:

- (i) the interventions under Tranche-1 and subsequent tranches are planned within the RoW (that comprises the land under canal section and the land under approach road for maintenance) and more precisely within the canal sections;
- (ii) the other interventions that could be planned for subsequent tranches include strengthening of the existing linkages between the different canal systems within the sub-basin including improvements in the tanks/ ponds. Some of these ponds/ tanks areas have been encroached upon for the purpose of farming. In other cases changes to dam operation could increase water levels and therefore result in peripheral flooding. These could potentially have certain impacts on the livelihood issues. The technical feasibility for these is yet to be established and hence it is difficult to assess the likely impacts in terms of the land requirement. However, any such interventions are not envisaged in Tranche-1 as per the investment plan proposed for Tranche-1.

23. The assessment of the sub-projects under consideration with regard to the projects interventions envisaged as of now and the ground level situation clearly reveals that direct resettlement impacts are unlikely. A very minimal extent of temporary impacts may be involved especially if there are establishment of construction camps, although this is not envisaged at this stage and would be confirmed with detailed planning as there are existing construction camp sites available in the command area. Similarly, as part of the overall IWRM approach the possibilities of on-line storage systems and the night storage reservoirs, if found technically feasible, after the detailed assessments are made during Tranche-1, the likely impacts in terms of land requirements and involuntary resettlement would need to be established. The costing for Tranche-1 has not considered any investment towards on-line storage and night storage reservoirs. Given the overall nature of the project (modernisation of canal works within the RoW of the canal) and set of interventions envisaged under Tranche-1, no action is needed with regard to Involuntary Resettlement Safeguards for Tranche-1.

24. However based on the final set of design interventions which would be evolved and planned for subsequent tranches (especially if the night storage reservoirs or online storage reservoirs are planned), the project could require preparation of Resettlement Plans (RPs) and such impacts can be assessed only once the technical feasibility for these interventions is established and design interventions are firmed up for the subsequent tranches. In this context, a Resettlement Framework (RF) is required to guide the involuntary resettlement safeguards that will be followed for the subsequent Tranches. All future sub-projects will be screened for involuntary resettlement safeguards with the following objectives:

- (i) to avoid involuntary resettlement wherever possible;
- (ii) to minimize involuntary resettlement by exploring project and design alternatives;

- (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and
- (iv) to improve the standards of living of the displaced poor and other vulnerable groups.

25. This Resettlement Framework (RF) has been formulated for the MFF to guide the preparation of subproject Resettlement Plans (RPs), if required, during subsequent Tranches of the Program planning and implementation. The RF identifies the broad scope of the Program and outlines the policy, procedures and institutional requirements for the preparation and implementation of subproject RPs. The Executing Agency (EA), Karnataka Neeravari Nigam Limited (KNNL) of the SGOK, will be responsible for conducting the social assessments and formulating RPs for subsequent sub-projects, where involuntary resettlement impacts are expected, as per the procedures outlined in this RF. The draft RPs will be disclosed to the Affected Persons (APs)<sup>1</sup> in local language (Kannada) and submitted to ADB for review and approval, and public disclosure prior to the award of civil works contracts. Compensation, relocation and rehabilitation processes will be completed prior to the commencement of any project-related construction activities.

26. Considering the nature of interventions proposed under the program, no specific adverse impacts are anticipated for the APs including Scheduled Tribes (STs), generally identified as Indigenous People (IP). ADB IP safeguards are not triggered because the project directly or indirectly does not affect the dignity, human rights, livelihood systems, or culture of the STs nor the project will affect territories claimed by the STs as their ancestral domain. During the community consultations also, it has been found that there is no specific uniqueness with regard to the economic status or the livelihood systems or cultural practices amongst the STs as compare to other communities in the villages. In addition, as part of the WUCs strengthening, special focus shall be made to ensure the participation of STs (indigenous) and SCs (vulnerable) in the planning and decision making process while preparation of Command Area Development Plans. It will also be ensured that under no circumstances the STs/ SCs are deprived of the benefits from the program. However, if there is any physical relocation of STs in any future Tranche, combined plan including Resettlement Plan and Indigenous Peoples Plan will be prepared in consultation with ADB.

## **II. OBJECTIVES, POLICY FRAMEWORK AND ENTITLEMENTS**

### **A. Review of Government Policies, Laws and ADB Safeguard Policy Requirements**

27. Presently, Land Acquisition Act, 1894 (LAA 1894 or LAA) and the National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007 or NRRP) guides the process of land acquisition and the rehabilitation and resettlement in India and the same applies for Karnataka. The State of Karnataka has provision for Land Acquisition for certain specific objectives under other sector specific Acts such as Karnataka Industrial Areas Development Act, 1966<sup>2</sup>, however the applicability of acquisition under the Act is limited to the areas notified under the Act (Section 1, 2(7)(a), 27-31). The provisions of LAA and NRRP are covered under this section to identify the gaps, if any, with regard to the provisions of ADB's Safeguard Policy Statement and delineate measures to fill these gaps.

<sup>1</sup> The Affected Persons (APs) in this Resettlement Framework refers to the displaced persons, the host communities and the concerned institutions

<sup>2</sup><http://www.karnatakaindustry.gov.in/documents/KarnatakaIndustrialAreaDevelopmentBoardAct1966.pdf>

## **B. Land Acquisition Act, 1894**

28. The Land Acquisition in India is carried out using LAA and it extends to whole of India except the state of Jammu-Kashmir. In addition, the National Government has enacted certain special purpose Acts like National Highways Act, 1956, which also provides for land acquisition for specific purpose. The Land Acquisition Act comprises of 55 Sections and is divided into the 8 Parts. A brief note on the Salient provisions of the Land Acquisition Act, LAA 1894 is enclosed as Annexure-3 to this Appendix. The Land Acquisition is applicable for legal owners of the land only and compensates for the land acquired in cash.

29. The major limitations associated with the acquisition through this Act were complete negligence of the rehabilitation and livelihood issues of the owners whose land has been acquired and the absence of any mechanism to address the resettlement and rehabilitation issues for the persons without legal ownership of land, especially the squatters<sup>3</sup> and encroachers<sup>4</sup>, who often are from the vulnerable groups. Several project specific initiatives were made to overcome these challenges in the 1980's and the 1990's but the nation lacked a policy framework till 2003, when the first such initiative was taken up by the Government of India to address the challenges being faced in different development projects.

## **C. National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007)**

30. In order to overcome the above referred limitations under the LAA, the Government of India formulated a NRRP for Project Affected Families in 2003, and it came into force with effect from February, 2004. Based on the experiences in the implementation of this policy, there were many issues which needed to be reviewed and thus, the NRRP was revised in 2007, which became effective from 31<sup>st</sup> October 2007. The NRRP 2007 comprises nine chapters including Policy; Objectives of NRRP; Definitions; Social Impact Assessments of Projects; Appointment of Administrator and Commissioner for Rehabilitation and Resettlement and their powers and functions; Rehabilitation and Resettlement Plan; Rehabilitation and Resettlement benefits for the affected families; Grievance Redressal Mechanism; and Monitoring Mechanism. The Policy covers the resettlement and rehabilitation issues related to the non-titleholders as well as Rehabilitation requirements (measures for restoration of livelihood) for the land owners whose land is under acquisition.

31. A brief note on the Salient Features of the NRRP along with the summary of entitlements under the Policy recommended for different type of losses is enclosed as Annexure-5 to this Appendix. The Policy defined the strategies and the minimum entitlements for different types of losses, and provided the flexibility for the requiring bodies to adopt higher benefit levels than provided under NRRP 2007.

32. The Government of India is in a process to provide statutory backing to NRRP 2007 and making amendments to the LAA 1894. In this regard, The Land Acquisition, Rehabilitation and Resettlement Bill, 2011 was presented in the Parliament in May 2012, still under discussion.

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<sup>3</sup>Squatters are those that are landless or without title to land and occupy public land for shelter and/or for carrying out their livelihoods as defined in ADB's Involuntary Resettlement Safeguards: A Planning and Implementation Good Practice Sourcebook.

<sup>4</sup> The term encroacher is also used to denote illegal extension into public property by a person who is a legal titleholder of his property. The person is an encroacher on the portion of the property occupied to which the person does not hold legal title as defined in ADB's Involuntary Resettlement Safeguards: A Planning and Implementation Good Practice Sourcebook..

The draft bill provides for the compensation rates in the range of 4 to 5 times the existing rates and shall be able to address the concerns related to lower rates of compensation to a large extent and match the replacement costs for land. The spirit of the bill as included in the Draft Bill reads as,

“to ensure a humane, participatory, informed consultative and transparent process for land acquisition for industrialisation, development of essential infrastructural facilities and urbanisation with the least disturbance to the owners of the land and other affected families and provide just and fair compensation to the affected families whose land has been acquired or proposed to be acquired or are affected by such acquisition and make adequate provisions for such affected persons for their rehabilitation and resettlement thereof, and for ensuring that the cumulative outcome of compulsory acquisition should be that affected persons become partners in development leading to an improvement in their post acquisition social and economic status and for matters connected therewith or incidental thereto”<sup>5</sup>

#### **D. The Karnataka State Laws and Policy on Resettlement and Rehabilitation**

33. The Karnataka Resettlement of Project Displaced Persons Act, 1987 was passed by the legislature in 1987 and received the president's assent in 1994 which was subsequently repealed by The Karnataka Repealing and Amending Act, 2002<sup>6</sup>. The State Government of Karnataka is in the process of working out a comprehensive and pragmatic framework on rehabilitation and resettlement (R&R) works for the families affected by irrigation projects across the State<sup>7</sup>.

34. With regard to the Command Area Development, the Karnataka Command Area Development Act, 1980 provides for preparation of Schemes and the land acquisition for these schemes as per the provisions of Section 12 to Section 16 of the Act. Section 12 of the Act covers the provisions related to the preparation of the scheme for the comprehensive development of the Command Area or any phase of it. The aspects to be covered under the scheme shall encompass:

- (i) area proposed to be covered under the scheme;
- (ii) the work or works to be executed;
- (iii) the phasing of the scheme both area wise and work wise ;
- (iv) the sketch plan of the area proposed to be covered under the scheme;
- (v) the reallocation or the realignment if any, of a pipe-outlet or the existing irrigation system;
- (vi) the survey numbers covered ;
- (vii) field boundaries as existing and as proposed ;
- (viii) the compensation to be given to or recovered from the land holders;
- (ix) the cost involved in the scheme as well as in each phase thereof;
- (x) the charges or dues to be levied on the beneficiaries ; and
- (xi) such other matters and particulars as may be prescribed.

35. Section 12 (4) provides for the payment of compensation to any affected land holder for the reduction in the extent of his holding under the above scheme and for recovery of compensation from any other landholder who is benefited in getting more extent of land under

<sup>5</sup> <http://rural.nic.in/sites/downloads/general/LSVersionofLARRBill.pdf> (unnumbered Page after Page 55)

<sup>6</sup> [http://dpal.kar.nic.in/pdf\\_files](http://dpal.kar.nic.in/pdf_files)

<sup>7</sup> <http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/new-policy-on-rr-soon/article4194086.ece>, The Hindu, dated December 13 2012

the scheme. The amount of compensation shall be determined so far as practicable in accordance with the provisions of the Land Acquisition Act, 1894. However, it does not preclude the determination of the amount of compensation by agreement with the benefitted and affected land holders and thereupon the amount so determined shall be the amount payable to such affected land holder.

36. Section 13 of the Act provides for notification of the Scheme in the official Gazette inviting objections and suggestions, if any, from all persons likely to be affected thereby, within thirty days from the date of such publication in the official Gazette. The Act provides for publication/ display of the notification for the Scheme on the Notice Board of village Panchayats, Taluk and Deputy Commissioner Office in order to provide opportunity to all the stakeholders to object/ suggest any changes. Based on the objections/suggestions received, necessary modifications are made and the Authority Sanctions the Scheme (referred as approved scheme) under Section 14. As part of the disclosure mechanism, the final scheme is notified in the official gazette and displayed on the Notice Board of village Panchayats, Taluk and Deputy Commissioner Office.

37. The notification of the scheme has the following consequences:

- a. It empowers the Authority to issue directions to any department of the State Government, any statutory or corporate body controlled by the State Government in respect of such matters as are specified in the approved scheme. It also makes it mandatory for all the agencies associated with any development plans relating to land development to intimate and seek the approval of the Authority for execution and are required to amend the plans as per the directions of the Authority.
- b. The Authority shall be deemed to be empowered to take all necessary action for the implementation of the approved scheme including levy of cost of works and other charges and to give directions to land holders with regard to the following matters:
  - (i) the crops which are to be raised and the rotation of such crops;
  - (ii) provision for drainage in the farm ;
  - (iii) distance of wells, tube-wells, pumps and other sources of irrigation from the distribution system ;
  - (iv) erection and removal of fences over lands
  - (v) submission of returns within such time and in such manner as may be provided by regulations containing a true and accurate statement regarding the following matters, namely :-
    - area of land cultivated by him, the classification of such land, his interest therein and encumbrances on such land, if any ;
    - the nature and quantity of agricultural produce raised by him;
  - (vi) such other matters as may be specified by regulations.

38. Section 16 of the Act defines the mechanism for execution of the approved scheme including provisions related to opportunity provided to the land owner for execution of works and it also empowers the Authority with a right to execute the same and recover the proportionate charges if the owner does not execute the works as per the provisions of the approved scheme. The Authority can facilitate in raising loans against the land owned and if the owners does not pay the installments (including interest), the amount can be recovered as arrears of land revenue. Section 16(3) provides the power to the Land Development Officer (Engineering) to effect realignment of field boundaries in the process for the physical planning and alter the area of the land held by the land holders in the Command Area or any other adjoining area. The



realignment and changes in the land holdings shall be duly mutated in the record of rights. Section 16(5) provides an opportunity to the holder of any land included in the approved scheme for comprehensive land development to deposit the amount required for such land development with the Authority for carrying out the land development under the scheme by itself or through an agency decided by the Authority.

39. The Karnataka Command Area Development Act primarily focuses on the lower levels of irrigation system as part of the command area, mainly the field channels and also makes a provision to levy the charges for the development works. In absence of any State R&R Policy to address the involuntary resettlement, the provisions related to NRRP, 2007 and the Land Acquisition Act are applicable for involuntary resettlement under the projects in the state.

## **E. Asian Development Bank Safeguard Policy**

### **1. Applicability of Asian Development Bank Safeguard Policy**

40. ADB Safeguard Policy Statement (SPS), 2009 shall be applicable for this Program in order to promote the sustainability of project outcomes by protecting the environment and people from potential adverse impacts of projects. ADB's SPS sets out the policy objectives, scope and principles for three key safeguard areas: (i) environmental safeguards (covered under separate section), (ii) involuntary resettlement safeguards, and (iii) Indigenous People's safeguards. The Policy requires development of Resettlement Framework (RF) and Indigenous Peoples Planning Framework (IPPF) for a Multi-tranche Financing Facility (MFF). As per the provisions of the Policy, the MFF as a whole is not screened and categorized as to its environment, involuntary resettlement, or Indigenous Peoples impacts. Instead, each tranche of the MFF would need to be screened and categorized. The RF provides guidance to the assessments of the subprojects of the subsequent tranches. The social impact assessment would need to be carried out for each sub-project.

### **2. ADB Involuntary Resettlement Safeguard Principles**

41. The Involuntary Resettlement Safeguards under ADB SPS 2009 requires the following objectives to be targeted as part of any project being prepared under ADB:

- (i) to avoid involuntary resettlement wherever possible;
- (ii) to minimize involuntary resettlement by exploring project and design alternatives;
- (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and
- (iv) to improve the standards of living of the displaced poor and other vulnerable groups.

42. The involuntary resettlement safeguards covers both the (i) physical displacement (relocation, loss of residential land, or loss of shelter) and (ii) economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. The ADB SPS is applicable whether such losses and involuntary restrictions are full or partial, permanent or temporary. The ADB SPS focus on participatory and consultative process in involuntary resettlement; replacing what is lost to ensure improved living condition for any affected persons, be it a titleholder or the ones without legal title on land, through appropriate strategies and package for compensation and assistance for rehabilitation, both physical and economic with special attention for vulnerable; and incorporating involuntary resettlement planning as part of the project design from the early

stages of project cycle and continued monitoring throughout the project cycle. SPS requires adherence to the following Policy Principles:

- (i) All the sub-projects shall be screened at the early stages in order to identify past, present, and future involuntary resettlement impacts and risks through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.
- (ii) The APs shall be involved in the resettlement planning through a continuous consultative process and all displaced persons shall be informed of their entitlements and resettlement options. The vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, shall get equal opportunities of participation in consultations and their special needs shall be incorporated in the resettlement plans. Appropriate mechanisms shall be put in place to address the grievances and facilitate resolution of the APs concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- (iii) Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.
- (iv) Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- (v) Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- (vi) Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- (vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- (viii) Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- (ix) Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and

a form and language(s) understandable to all APs. Disclose the final resettlement plan and its updates to affected persons.

- (x) Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- (xi) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.
- (xii) Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

#### **F. Comparison of NRRP with ADB's Safeguards Policy Statement**

43. As of now, the SGOK does not have R&R Policy and the provisions of LAA along with the provisions of NRRP are applicable for the formulation of new projects. The review of the provisions of the LAA and NRRP and its comparison with the Policy Principles for involuntary resettlement laid down under ADB SPS 2009 has been made and it can be concluded that the provisions made under the LAA supplemented with NRRP 2007 broadly fulfill the requirements of Involuntary Resettlement Safeguards under ADB SPS with a few minor gaps, which are listed in the matrix below.

<b>Policy Principle</b>	<b>ADB IR Safeguard Policy</b>	<b>LAA, 1894 and NRRP 2007</b>	<b>Gap, if any, and proposed measures to fill the gap</b>
Compensation for Assets Acquired	Compensation must be based at Replacement Cost. The calculation of full replacement cost will be based on the following elements: (i) fair market value; (ii) transaction costs; (iii) interest accrued, (iv) transitional and restoration costs; and (v) other applicable payments, if any.	Loss of assets to be compensated to the extent of actual loss and compensation award shall take into account the market value of the property being acquired.	Though, the LAA also provides for determination of market value but invariably it has been observed that the methodology used in arriving at the Market Value (the Collector Guideline Rates for Stamp and Registration Purposes or the average price of land as per the sale deeds of land in the area, which is often undervalued) and do not match with the replacement value of land in the open market. The methodology for replacement value of land and assets provided under the RF and the gap between the Replacement Cost and Compensation proposed to be covered with replacement assistance for land and assets and the allowances as per the framework. In

Policy Principle	ADB IR Safeguard Policy	LAA, 1894 and NRRP 2007	Gap, if any, and proposed measures to fill the gap
			addition, the provisions have been included for meeting out the transaction costs and supporting allowances in the entitlement matrix for the project.
Cut-off Date for Entitlement especially for non-titleholders/ the DPs without legal title	The borrower/client will conduct socioeconomic survey(s) and a census, with appropriate socioeconomic baseline data to identify all persons who will be displaced by the project and to assess the project's socioeconomic impacts on them. For this purpose, normally a cut-off date will be established by the host government procedures. In the absence of such procedures, the borrower/client will establish a cut-off date for eligibility. Information regarding the cutoff date will be documented and disseminated throughout the project area.	Paragraph 7.1 of NRRP states "The rehabilitation and resettlement benefits shall be extended to all the affected families who are eligible as affected families on the date of declaration of affected area by notification under Paragraph 6.1 of NRRP, any division of assets in the family after the said date may not be taken into account". Section 7.3 of NRRP states, "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 ...."	The cut-off date for eligibility for compensation for physical assets of the legal owners of the assets affected by Project activities will be the date of publication of preliminary notification for acquisition under section 4 of the Land Acquisition Act, 1894 as the affected area would be declared under Section 6.1 of NRRP if there are more than 400 affected persons in plains/ 200 persons hills and specified areas. In case of non-titleholders such as squatters, informal dwellers and encroachers the date of completion of the census survey for a particular sub-project will be considered as the cut-off date. People moving into the project area or subproject areas after its cut-off date will not be entitled to any assistance.

### III. INVOLUNTARY RESETTLEMENT PRINCIPLES FOR THE PROGRAM

#### A. Involuntary Resettlement Principles

44. Based on the analysis of existing applicable policies in Karnataka/ India and ADB Involuntary Resettlement policies and procedures, the broad involuntary resettlement principles that will be applied to this program and its subproject are:

- (i) Involuntary resettlement, including both physical displacement and economic displacement, will be avoided or minimized by identifying possible alternative project designs and appropriate social, economic, operational and engineering solutions that have the least impact on the population in the Project area;
- (ii) Where involuntary resettlement is unavoidable for the wider gains to the larger community and achievement of IWRM objectives, the persons affected by the project will be offered assistance under the program for improving or at least restoring their livelihoods, income, and standard of living;
- (iii) The populations/ persons affected by the Project are defined as those who may stand to lose, as a consequence of the Project, all or part of their assets which

- includes homes, lands, commercial properties, tenancies, income earning opportunities, social and cultural activities and infrastructure together with any other losses that may be identified in the resettlement planning exercise;
- (iv) Neither lack of legal rights to the assets lost, tenure status, nor social or economic status will bar the DP from entitlement to the compensation and rehabilitation objectives and measures outlined in the Framework. To further clarify, the DPs in a project area will include: (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement benefits will apply be available to all the three types of displaced persons.
  - (v) All DPs will be entitled to be compensated as per the principle of replacement of affected assets, incomes and businesses; all affected persons will also be provided with transitional assistance and income restoration and other rehabilitation assistance which will be sufficient to improve or at least restore their pre-project living standards, income levels and productive capacity. The R&R assistance shall be payable as per the entitlement matrix for all APs and shall be applicable for all future subprojects;
  - (vi) The Resettlement Plans for the sub-projects will be prepared by the EA in consultation with the communities;
  - (vii) The cut-off date for eligibility for compensation for physical assets of the legal owners of the assets (including land and associated assets) affected by Project activities will be the date of publication of preliminary notification for acquisition under section 4 (1) of the Land Acquisition Act, 1894. In case of DPs without legal title to land such as squatters, informal dwellers and encroachers the date of completion of the census survey for a particular sub-project will be considered as the cut-off date. People moving into the project area or subproject areas after its cut-off date will not be entitled to any assistance.
  - (viii) In the event of any population relocation, efforts will be made to maintain the physically displaced persons existing social and cultural institutions to the greatest extent possible;
  - (ix) ADB will not approve any contract for civil works for any subproject to be financed from loan proceeds until SGOK has satisfactorily ensured completion of rehabilitation activities, and in accordance with the approved RPs;
  - (x) Consideration must be given, and assistance provided, where necessary to APs most vulnerable to the adverse impacts of IR. This includes the poorest/ below poverty line, SCs and STs, female headed households, the disabled and elderly with no means of support, landless and those without a title to land, marginal farmers or those who become marginal as a result of acquisition, to mitigate their hardships and to assist them in improving their livelihoods. Their needs will be considered in the formulation of the RP; and in the options and mitigation measures identified;
  - (xi) The RF and RPs will be disclosed to all stakeholders including all APs in local language (Kannada). The RPs will be displayed at the offices of Gram Panchayats and WUCs and any other such appropriate places in the villages where communities gather for socio-cultural activities;

- (xii) Adequate budgetary support will be fully committed and be made available to cover the costs of Resettlement and Rehabilitation (R&R) and other social safeguard measures within the agreed RP implementation period;
- (xiii) Detailed RPs for implementation will be translated into local languages and placed in Project and commune offices for reference of APs, as well as any interested groups;
- (xiv) Appropriate grievance redressal mechanisms will be put in place for addressing the grievances of the APs, if any, with regard to the compensation, R&R assistance and any other issues arising as a result of program execution;
- (xv) Appropriate reporting, monitoring and evaluation (M&E) mechanisms will be identified and set in place as part of the safeguard management system. If any of the sub-projects in any Tranche involves involuntary resettlement issues, a qualified and experienced external expert or qualified NGO will be engaged to verify the monitoring information generated and advise on compliance issues; and
- (xvi) The policy applies to all displaced or affected persons regardless of the total number affected or the severity of impact.

## **B. Eligibility Criteria for DPs**

45. APs for the purpose of this RF will include all displaced persons, host communities and other institutions. Displaced Persons (DPs) will include any person, who on account of changes that result from the project will have their: (i) standard of living adversely affected; (ii) right, title, or interest in any house, land (including residential, commercial, agricultural, forest, and/or grazing land), water resources, or any other moveable or fixed assets acquired, dispossessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence, or habitat adversely affected, with or without displacement.

46. For the purpose of this RF, the vulnerability and DPs without legal title to land are defined here. The Vulnerable DPs will include the poorest/ below poverty line, SCs and STs, female headed households, the disabled and elderly with no means of support, landless and those without a title to land, marginal farmers or those who become marginal as a result of acquisition and these will be assisted to mitigate their hardships and improve their livelihoods.

47. The DPs without legal title to land will be classified in two categories, (i) Squatters and (ii) Encroachers. Squatters are those that are landless or without title to land and occupy public land for shelter and/or for carrying out their livelihoods. Encroacher is used here to denote illegal extension into public property by a person who is a legal titleholder of his property. The person is an encroacher on the portion of the property occupied to which the person does not hold legal title.

48. The following DPs could potentially be impacted during implementation of the Program, if certain interventions like night storage reservoir or on-line reservoirs are included or any changes in the project designs are planned in addition to the envisaged canal lining/modernization works and if the need is identified during detailed designing for setting up any additional temporary constructions camps and accordingly eligible for compensation and/ or assistance as the case may be depending on the provisions made under the Entitlement Matrix.

- (i) DPs whose land is affected – DPs whose land is being used for agricultural, homestead, residential, or commercial purposes and is affected either in part or in total and the effects are either temporary or permanent shall be eligible for

- compensation on the basis of replacement cost and assistance for replacement of land;
- (ii) DPs whose structures are affected – DPs whose structures (including ancillary and secondary structures) are being used for residential, commercial or worship or any other purposes which are affected in part or in total and the effects are either temporary or permanent shall be eligible for compensation on the basis of replacement cost and assistance for replacement of affected assets including the assistance for transitional phase and the relocation;
  - (iii) DPs with other assets affected – DPs who have other assets, such as crops or trees, affected either temporarily or permanently shall be eligible for compensation on the basis of market value of the loss;
  - (iv) DPs losing income or livelihoods – DPs whose business, source of income or livelihood (including employees of affected businesses or share croppers/agriculture labor on the agriculture field) is affected in part or in total, and affected either temporarily or permanently shall be eligible for assistance for restoration of the loss of business/ wage income;
  - (v) Vulnerable DPs including IPs– DPs included in any of the above categories who are defined as vulnerable/ IPs shall be eligible for additional benefits and assistance for rebuilding and improvement of income and livelihoods as defined in the Policy and the supporting entitlement matrix; and.
  - (vi) APs losing access to common property resources – APs whose access to or use of common property resources is affected on a temporary or permanent basis shall be assisted for rebuilding and/ or restoration of community resources/ facilities;

#### **IV. SOCIO-ECONOMIC INFORMATION**

##### **A. Social Impact Assessment and Resettlement Plans**

49. All future sub-projects will be screened for involuntary resettlement impacts from as early as planning stage for the sub-project and social impact assessment exercise will be taken up for each of the sub-projects. The socioeconomic survey(s) and a census, with appropriate socioeconomic baseline data to identify all persons who will be displaced by the project and to assess the project's socioeconomic impacts on them will be carried out for all sub-projects under the Program. The Cut-off date will be established for eligibility for compensation for each sub-project, which will be the date of publication of notification under section 4 (1) of the LAA for legal owners, and, will be the date of completion of the census survey for non-titleholders. Information regarding the cutoff date will be documented and disseminated throughout the project area.

50. The social impact assessment (SIA) report will include (i) identified past, present and future potential social impacts, (ii) an inventory of displaced persons and their assets, (iii) an assessment of their income and livelihoods, and (iv) gender-disaggregated information pertaining to the economic and socio-cultural conditions of displaced persons. The Social Impact Assessment exercise will also identify individuals and groups who may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status. Necessary targeted measures will be planned and implemented in order to ensure that neither adverse impacts fall disproportionately on the vulnerable DPs and nor they are disadvantaged in relation to sharing the benefits and opportunities resulting from development if any such impacts are assessed.

51. If any sub-project in future tranches involve involuntary resettlement impacts, the RPs will be prepared with an objective to ensure that livelihoods and standards of living of displaced persons are improved, or at least restored to pre-project (physical and/or economic) levels and that the standards of living of the displaced poor and other vulnerable groups are improved, not merely restored, by providing adequate housing, security of land tenure and steady income and livelihood sources. The RP will be prepared as per the structure of RP outlined in Annexure-6 to this Appendix.

52. All RPs will be prepared on the basis of social impact assessment and through meaningful consultation with the affected persons and necessary budget allocations will be made available for RP preparation and implementation. The RPs will be prepared through a resettlement specialist-consultant (s) engaged as a member of the detailed technical design team. A resettlement plan will include measures to ensure that the displaced persons are (i) informed about their options and entitlements pertaining to compensation, relocation, and rehabilitation; (ii) consulted on resettlement options and choices; and (iii) provided with resettlement alternatives. During the identification of the impacts of resettlement and resettlement planning, and implementation, adequate attention will be paid to gender concerns, including specific measures addressing the need of female headed households, gender-inclusive consultation, information disclosure, and grievance mechanisms, to ensure that both men and women receive adequate and appropriate compensation for their lost property and resettlement assistance, if required, as well as assistance to restore and improve their incomes and living standards.

53. The RPs will include detailed measures for income restoration and livelihood improvement of displaced persons in order to ensure that Income sources and livelihoods affected by project activities will be restored to atleast pre-project levels, and every effort will be made to improve the incomes of displaced persons so that they can benefit from the project, especially for the vulnerable groups. The resettlement plan will specify the income and livelihoods restoration strategy, the institutional arrangements, the monitoring and reporting framework, the budget, and the time-bound implementation schedule.

54. The RPs will be finalized by updating the census and inventories of loss of assets after the detailed engineering designs are completed. The entitlement matrix of the resettlement plan will be updated, if required, to reflect the relevant changes without lowering the entitlements in the entitlement matrix during the revision/ finalization of the RPs. Projects with significant involuntary resettlement impacts will be provided with adequate contingency funds to address involuntary resettlement impacts that are identified during project implementation. The DPs will be consulted and informed about their entitlements and relocation options. The RPs including any revisions in RPs/ supplementary RPs will be submitted to ADB for review before any contracts are awarded.

## **B. Methodology for Replacement Cost of Assets**

55. The replacement cost of land will be the highest of the value arrived using the following three methods:

- (i) Estimated Market Value of Land as notified by Department of Stamp and Registration, Government of Karnataka based on location, type of soil, source of irrigation and intensity of irrigation, type of use, etc. In case the estimated values are not revised on annual basis, the Whole Sale Price Index as declared by the GoI will be applied from the year of notification to the year of award;



- (ii) Average of recent land sales/transfer. For the purpose of arriving at the average value of land sales/ transfer, the sale records for last three years will be considered. In case no land sale has taken place in last three years for a particular village, the land sale data of adjoining villages in the command area with similar notified values of land in (i) shall be considered for arriving the market value.
- (iii) For agricultural/ homestead land in the rural areas, the crop productivity method will be applied and the market value of land will be derived on the basis of the following principles
  - Thirty (30) times the land's annual average agricultural productivity (average of the quantity of crop produced X the market value of the produce) over the past three years for irrigated land/ homestead;
  - Twenty (20) times the annual average agricultural productivity (average of the quantity of crop produced X the market value of the produce) over the past three years for un-irrigated land; and
  - For land which uncultivable land or the land which has not been cultivated for more than three years, the replacement value will be worked out at an average ten (10) times the annual average agricultural productivity of other lands in the village.

56. For land acquisition, compensation for land acquired will be decided by the Competent Authority as per the provisions of the Land Acquisition Act and its amendments thereof from time to time. The replacement assistance for land shall be payable to the DPs who are awarded the compensation for land by the Competent Authority.

57. The value of houses, buildings and other immovable properties will be determined on the basis of relevant and updated Schedule of Rates (SoR) as on date without depreciation. If the Schedule of rates have not been revised or the index of escalation has not been declared by the concerned agency of the SGOK, the valuation of assets will be worked out on the basis of the available SoR and the Wholesale Price Index from the year of SoR to the date of notification under Section 4 of the Land Acquisition Act will be applied to arrive at the replacement value of immovable property.

58. The EA will determine the replacement value of land and property to be acquired based the above principles in consultation with the WUCs and the available records of the agriculture and revenue department. If the compensation amount as declared under the Land Acquisition Act is less than the replacement cost of the land and property, the EA will pay the difference between the compensation and the replacement cost as replacement assistance for land and property. In addition, the salvage material from the dismantled structures/ assets would remain the property of DPs and no charges shall be levied for the same, and accordingly, all expenses associated with demolition/ dismantling of the structure, safe disposal of the salvage material shall be borne by the DP in lieu of the right to salvage material. DPs will be given atleast a three month notice prior to their relocation.

59. Compensation for trees will be based on their market value. The compensation for the trees will be worked out by the EA as per prevailing rate of the Forest Department declared for the year. The valuation of crops and trees will be based on (i) survey of market prices in the district and adjacent districts for different types of crops to establish an average market price and an assessment to ascertain whether the compensation is less or greater than that price; (ii) income loss will be calculated as annual produce value for at least 3 seasons depending on the nature of crops/trees. The basic principle to be adopted for deciding on the number of seasons

will be based on the average years a particular tree requires for giving returns from its produce. The timber from the trees on the private land will be disposed off as per the prevailing practices in the state government under relevant Environment and Forest Acts and the right to timber shall vest with the acquiring agency/ Forest Department after the payment of compensation.

60. The DPs will be compensated for immovable properties on the principles of replacement cost that would include fair market value to replace the property, transaction costs, interest accrued, transitional and restoration costs, and any other applicable payment. The common property resources of the APs lost under the project will be replaced through WUCs on the similar principle as proposed for implementation of field channels improvement works under the procurement plan.

## **V. ENTITLEMENT MATRIX: COMPENSATION, INCOME RESTORATION AND RELOCATION**

61. Compensation and resettlement and rehabilitation assistance for each category of DP are based on the type and level of loss or impact. The Project Entitlement Matrix is provided below. It has been prepared on the basis of expected impacts and the minimum requirements to be met for various types of losses, as per the NRRP. It identifies the categories of impact and shows the entitlements for each type of loss. If additional or unforeseen impacts are identified during the detail design and/or implementation phases then such losses will to be included in a revised entitlement matrix as well as in the RPs and addressed as per the general principles defined for the Project to be mutually agreed between the ADB and SGoK.

### Entitlement Matrix

Type of Loss	Unit of Entitlement	Entitlements	Details
<b>R&amp;R Package for Titleholders</b>			
A. Agricultural Land	Displaced Person (Land Owner(s) as per Revenue Records)	a) Compensation b) R&R Assistance	<p>a) Compensation for land and/or assets on agricultural field will be paid as per the provisions of the Land Acquisition Act, 1894.</p> <p>b) If the replacement value (determined as per this Resettlement Framework) is more than the statutory compensation, as determined by the Competent Authority, then the difference will be paid by the Project in the form of Replacement Assistance for Land and assets</p> <p>c) Compensation for standing perennial and non-perennial crops grown by the Displaced Person as per the provisions defined in RF</p> <p>d) Advance notice to harvest the crops</p> <p>e) If the residual plot(s) is (are) not viable, i.e., less than average land holding of the district, the following options will be given to the DP.</p> <ul style="list-style-type: none"> <li>• The DP keeps the remaining land, and replacement value (the compensation and assistance) is paid for the land to be acquired ,</li> <li>• Compensation and replacement value are given for the entire plot including residual plot, if the owner of such land wishes that the project authority should also acquire his residual plot. The project authority will acquire such residual plot,</li> </ul> <p>f) For loss of entire agriculture land, the DP will be provided agricultural land or cultivable wasteland to the extent of actual land loss by the DP 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. This benefit will 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 or the DPs from the vulnerable groups as defined in this RF. (Marginal farmer defined as a cultivator with an un-irrigated land holding up to one Hectare or irrigated land holding up to half Hectare). This shall be in lieu of the compensation amount payable at replacement cost.</p> <p>g) All fees, stamp duties, taxes and other charges, as applicable under the relevant laws, incurred in the relocation and rehabilitation process will be borne by the EA.</p> <p>h) In case of allotment of wasteland or degraded land in lieu of the acquired land, each DP will get a one-time financial assistance Rs. 15,000 per hectare for land development. In case of allotment of agricultural land in lieu of the acquired land, each DP will get a one-time financial assistance of Rs. 10,000.00 for agricultural production.</p> <p>i) Monthly subsistence allowance equivalent to twenty-five days minimum agricultural wages per DP or Rs. 3500, whichever is higher per month for a</p>

Type of Loss	Unit of Entitlement	Entitlements	Details
			period of one year from the date of displacement.
B. Homestead Land and assets (residential land and structure)	Displaced Family (Land Owner (s) as per Revenue Records)/ Nuclear Family	a) Compensation at replacement cost b) R&R Assistance	<p>a) Compensation for land and structures/ assets will be paid as per the provisions of the Land Acquisition Act, 1894.</p> <p>b) If replacement cost for land and structure (as defined in this RF) is more than the compensation determined by the Competent Authority, then difference is to be paid by the EA in the form of Replacement assistance for land and structure.</p> <p>c) Project assisted relocation option will be provided to fully physically displaced families and those whose residential structures becomes non-livable as a result of Project impacts and a relocation site will be developed in consultation with these displaced families provided that such land is available in the same locality. The option will be provided if there are more than 25 displaced families to be relocated. Basic amenities and other necessary infrastructure at relocation sites will be provided by the EA.</p> <p>d) In case of fully physically displaced family<sup>8</sup>, allotment of 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. These benefits shall be in lieu of the compensation amount payable at replacement cost.</p> <p>e) All fees, stamp duties, taxes and other charges, as applicable under the relevant laws, incurred in the relocation and rehabilitation process will be borne by the EA.</p> <p>f) Monthly transitional allowance equivalent to Rs. 2500, for a period of one year from the date of displacement to cover for the accommodation during the transition phase.</p> <p>g) Shifting allowance of Rs.10,000/- or free transportation to the resettlement habitat or their new place of inhabitation, shall be provided to each physically displaced family by the Project Authority.</p> <p>h) Right to salvage material from demolished structure/building with responsibility of demolition vested with the owner.</p>
C. Land and Assets (For Commercial/ residential-cum-	Displaced Person (Land Owner (s) as per Revenue	a) Compensation at replacement cost b) R&R Assistance	<p>a) Compensation for land and structure/ assets will be paid as per the provisions of the Land Acquisition Act, 1894.</p> <p>b) If replacement cost for land and structure (as defined in this RF) is more than</p>

<sup>8</sup> "Family" shall include 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

Type of Loss	Unit of Entitlement	Entitlements	Details
commercial structure)	Records)		<p>the compensation determined by the Competent Authority, then difference is to be paid by the EA in the form of Replacement assistance for land and structure.</p> <p>c) Project assisted relocation option will be provided to fully economically displaced persons and those whose commercial structures become unviable for commercial activity as a result of Project impacts and a site for commercial activities will be developed in consultation with these affected DPs provided that such land is available in the same locality. The option will be provided if there are more than 10 economically displaced persons are to be relocated. Basic amenities and other necessary infrastructure at such sites will be provided by the EA.</p> <p>d) In case of fully displaced person, allotment site for commercial use to the extent of actual loss of area of the acquired commercial structure but not more than fifty square metre of land in rural areas, or twenty five square metre of land in urban areas, as the case may be, for the DP. These benefits shall be in lieu of the compensation amount payable at replacement cost.</p> <p>e) All fees, stamp duties, taxes and other charges, as applicable under the relevant laws, incurred in the relocation and rehabilitation process will be borne by the EA.</p> <p>f) Monthly subsistence allowance equivalent to twenty-five days minimum wages for skilled labour or Rs. 3500, whichever is higher per month for a period of one year from the date of displacement to cover for the disruption caused and reestablishment of business</p> <p>g) Shifting allowance of Rs.10,000/- or free transportation to site for commercial use, shall be provided to each physically displaced person by the Project Authority.</p> <p>h) Right to salvage material from demolished structure/building.</p>
<b>R&amp;R Package for Tenants</b>			
D. Residential tenants	Displaced Family	R&R Assistance	<p>a) The amount of deposit or advance payment paid by the tenant to the landlord and/or the remaining amount at the time of expropriation, if the tenant has documentary evidence for the deposit/ advance and as per the conditions of the agreement between tenant and the owner. (This will be deducted from the payment of assistance to the landlord/owner).</p> <p>b) A sum equal to 3 months rental or Rs 3000/- per month, whichever is lesser in consideration of the disruption caused.</p> <p>c) Compensation for any structure that tenant has erected on the property with evident consent and permission of the owner. (This will be deducted from such payment to the landlord/owner).</p> <p>d) Shifting allowance of Rs.10,000/- or free transportation to alternate site shall</p>

Type of Loss	Unit of Entitlement	Entitlements	Details
			be provided to each physically displaced family by the Project Authority.
E. Commercial Tenants	Displaced Person	R&R Assistance	<p>a) The amount of deposit or advance payment paid by the tenant to the landlord and/or the remaining amount at the time of expropriation, if the tenant has documentary evidence for the deposit/ advance and as per the conditions of the agreement between tenant and the owner. (This will be deducted from the payment of assistance to the landlord/owner).</p> <p>b) A sum equal to 3 months rental or Rs 3000/- per month, whichever is lesser in consideration of the disruption caused.</p> <p>c) Compensation at replacement cost for any structure that tenant has erected on the property with evident consent and permission of the owner. (This will be deducted from such payment to the landlord/owner).</p> <p>d) Shifting allowance of Rs.10,000/- shall be provided to each physically displaced family by the Project Authority.</p> <p>e) Additional One Time Financial Assistance of Rs. 10,000.00 shall be payable to cover for re-establishment of business/ commercial activity</p>
<b>R&amp;R Package for DPs without Legal Title to Land</b>			
F. Agricultural land possessed by DPs without Title	Displaced Person excluding Encroachers as defined in this RF	R&R Assistance	<p>a) DPs will be notified and given a time frame in which they will be required to remove their assets and harvest their crops.</p> <p>b) Compensation for standing perennial and non-perennial crops grown by the DPs</p> <p>c) Monthly subsistence allowance equivalent to twenty-five days minimum agricultural wages per DP or Rs. 3500, whichever is higher per month for a period of one year from the date of displacement.</p> <p>d) Assistance in training for livelihood and income restoration</p>
	Encroachers	R&R Assistance	<p>a) DPs will be notified and given a time frame in which they will be required to remove their assets and harvest their crops.</p> <p>b) Compensation for standing perennial and non-perennial crops grown by the DPs</p>
G. Land possessed by Squatters and encroachers for Residential/ Commercial	Vulnerable Displaced Family excluding Encroachers as defined in this RF	R&R assistance	<p>a) The Displaced Family will 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 displaced family which opts not to take the house offered or the government is unable to provide the land for house, the displaced family will get a suitable one-time financial assistance for house construction, and the amount will not be less than what is given under any programme of house construction by the Government of India as revised from time to time for residential and Commercial squatters will be eligible for one time financial assistance of Rs. 25000 for construction of working</p>

Type of Loss	Unit of Entitlement	Entitlements	Details
			<p>shed or shop.</p> <p>b) Shifting allowance of Rs. 10,000/- lump sum or free transportation to the resettlement habitat or their new place of inhabitation/ site for commercial activity, shall be provided to each physically displaced family by the Project Authority.</p> <p>c) Right to salvage materials from the demolished structure.</p> <p>d) A transitional allowance of Rs.2,000/- per month per physically displaced family shall be provided on vacation of land/structure for a period of one year from the date of vacation</p>
	Non-vulnerable Displaced families	Compensation for Structure at replacement cost and R&R Assistance	<p>a) Compensation for structure at replacement cost.</p> <p>b) Shifting allowance of Rs. 10,000/- lump sum or free transportation to the resettlement habitat or their new place of inhabitation/ site for commercial activity, shall be provided to each physically displaced family by the Project Authority.</p> <p>c) Right to salvage materials from the demolished structure.</p>
	Encroachers	Compensation for structure at replacement cost	<p>a) Compensation for structure at replacement cost.</p> <p>b) Right to salvage materials from the demolished structure.</p>
I. Shifting Business – Mobile Vendors	Displaced Person	None	Not eligible for any compensation or assistance
J. Kiosks and Ambulatory Vendors	Displaced Person	Assistance for business disruption	Assistance will be paid as one time lump sum amount of Rs. 3000 for shifting and temporary loss of business. Ambulatory vendors who have been granted license will also be eligible for same assistance as Kiosks
<b>R&amp;R Package for Wage Earners</b>			
K. Loss of wage earnings	Displaced Persons including a) employee in commercial establishments b) agricultural laborer/share-croppers/tenants	Assistance	<p>Individual employee/ agricultural laborer/ sharecropper indirectly affected due to their employer being physically displaced will be assisted for their economic rehabilitation in following way.</p> <p>a) Assistance will be paid on a case by case basis, as per the prevailing local wage rates for up to 100 days.</p> <p>b) Employment opportunity on priority basis for DPs in the project if desired so by them.</p> <p>c) Preference will be given to these DPs in availing other development program/ schemes being implemented by Government in the Project area</p> <p>d) Vocational training would be provided for up-gradation of skills to the DPs belonging to vulnerable groups and losing their income due to loss of commercial structures/ agricultural activity</p>
<b>Loss of Community Infrastructure/Common Property Resources</b>			
L. Common	APs/ Community	Relocation	Relocation will be financed under the project works will be executed through

Type of Loss	Unit of Entitlement	Entitlements	Details
Property Resources			WUCs at the place as would be determined in consultation with representatives of the community.
<b>Any Other Impact</b>			
M. Temporary impact during Project Implementation	a) Community b) Household c) Individual	Compensation	a) The contractor shall bear the cost of any impact on crops adjacent land during construction phase. b) All temporary use of lands outside proposed site to be through written approval of the landowner by contractor. c) Location of Construction camps by contractors in consultation with EA and local people. d) A legal covenant in this effect will be included in the contracts for civil works.
N. Unforeseen impacts if any	a) Community b) Household c) Individual	a) Compensation as per this policy framework b) R&R assistance as per this policy framework	Unforeseen impacts will be assessed on case by case basis at the time of project planning and implementation and suitable compensation/ assistance as per this policy framework.



## **VI. PUBLIC CONSULTATION, PARTICIPATION AND DISCLOSURE OF RP**

62. Resettlement Plan, if any, will be prepared and implemented in close consultation with the stakeholders and will involve focus group discussion (FGD) and meetings, particularly with the affected households. In addition, a Public Consultation and Disclosure Plan will be prepared for each of the subproject. The RP will be made available in local language(s) during the public meetings at the community level. Copies of draft RPs will also be made available at the local level public offices such as the office of gram panchayats and WUCs (if available) to stakeholders for local inputs prior to award of civil work contract. The RP will be disclosed on ADB and KNNL websites and the consultation will continue throughout the project implementation period and the cost will be appropriately budgeted. In case there is no impact and no Resettlement Plan is needed, the EA will make disclosure of the same informing the Gram Panchayats, WUCs, market places along the canals that no land or structure, irrespective of their title will be affected by any activities of this project. The report of this disclosure giving detail of date, location will be shared with ADB.

## **VII. GRIEVANCE REDRESS MECHANISM**

63. Each RP will also outline a detailed procedure for community complaint and grievance redress mechanism. The grievance redress mechanism would comprise three stages/ levels. The WUCs/ PIO will inform the DPs/ APs about the provisions of grievance redress mechanism as part of the consultations and disclosure.

64. At the first stage, the person with any form of grievance would approach the WUCs (proposed as the agency responsible for implementation of the RPs) and the Executive members will make efforts to resolve the grievance at their level in a consultative manner. If the affected person is not satisfied/ the grievance is not redressed within 3-5 days, the WUCs will be responsible for assisting the concerned person for getting the grievance registered with the Project Manager at PIO.

65. At the second stage, the Project Manager will ensure that the aggrieved person is heard and his grievance redressed in the best possible manner in a consultative manner within 1 week from the date of registering the grievance. If the affected person is not satisfied/ the grievance is not redressed within 1 week, the Project Manager will be responsible for getting the grievance registered for the hearing by the Grievance Redress Committee (GRC).

66. The GRC will comprise the Deputy Commissioner as Chairman, a member from the Revenue and Agriculture Department, a representative of KNNL, Panchayat and WUC members and representatives of affected persons, including women and vulnerable groups. The GRC will conduct hearing on the grievance within 3 weeks from the date of registration of grievance. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, and other assistance. All costs incurred in resolving the complaints will be borne by the project. A comprehensive record will be maintained by EA for all grievance proceedings organized at different stages.

67. However, at any stage of the GRM, an aggrieved person will be free to access the country's legal system and that this is not conditional upon the perceived unsatisfactory outcome of the GRM.

## **VIII. INSTITUTIONAL ARRANGEMENTS**

68. KNNL is the Executing Agency (EA) for the Program. The EA -Karnataka Neeravari Nigam Limited (KNNL) will have the overall responsibility for coordination and financing of the resettlement plans for such sub-projects as per this framework and submit to ADB for review and approval prior to contract award. ADB will post the RP on its Website. Approval of RPs for each sub-project by ADB will be a condition for the award of contract of civil works. In case of land acquisition, the date of publication of preliminary notification for acquisition under section 4 of the Land Acquisition Act, 1894 will be treated as the cut-off date. For non-titleholders without the title for land, the cut-off date will be the day the census survey is completed. All compensation and resettlement assistance will be paid prior to displacement or acquisition of land or other assets. The EA will ensure that this agreed RF is closely followed while formulating the RPs for the sub-projects involving involuntary resettlement and during implementation of RP. The EA will further ensure that adequate resettlement budgets are given on time to PMU to facilitate the formulation and implementation of RPs.

69. As per the proposed implementation institutional arrangements, it is proposed to set-up a Project Management Unit (PMU) within the Karnataka Neeravari Nigam Limited (KNNL) with Chief Engineer, Irrigation Central Zone, Munirabad as the Program Director. This office will be functional for the whole Project duration. The PMU will have the primary responsibility for the coordination, planning and implementation of the RPs. The Social and Gender Expert proposed under the PMU Institutional Cell will be responsible for ensuring timely preparation and effective implementation of RPs. The Program Management Unit will hire the services of Resettlement Specialist familiar with ADB policy and procedures for the preparation of RPs/ assessment of likely resettlement impacts.

70. The KNNL or its Divisions have been primarily responsible for implementation of civil works or managing the distribution of water under the canal systems. As per the discussions with the officials of the Divisions, the land acquisition has not been involved in the earlier interventions executed under Bhadra or TLBC projects. The land acquisition issues in other projects managed by the agency are dealt mainly through the district administration and major focus of the agency has been on modernization works in the recent years. Even under the current program IR issues are not anticipated as of now unless some major interventions are planned for subsequent tranches as part of the overall IWRM approach. The staff of the KNNL/ PMU responsible for the program implementation will be provided training on IR Issues in order to build the institutional capacity in IR for this program in specific and the projects of the agency in general. The scope of training will include ADB resettlement policy and principles and the IR Policy applicable for the project.

71. The PIO will be established in the Office of the concerned Superintending / Executive Engineer. The concerned Superintending / Executive Engineer will be the Project Manager and the Land Development Officer (Agriculture) assigned by the CADA will be the Deputy Project Manager. The PMU will coordinate with PIOs for sub-project level RP related activities. The Deputy Project Manager will be responsible for resettlement issues and will be supported by the SSTs at the level of PIO in the implementation and monitoring of IR activities. The staff at the PIO level, SSTs and WUCs will be provided with the training for implementation of the RP, wherever applicable. The PIO will maintain all databases, work closely with DPs and other stakeholders and monitor the day-to-day resettlement activities.

72. The PIO will be responsible for working out the replacement costs for land and structure and the same shall be approved by the Committee to be constituted under the Chairmanship of Deputy Commissioner with representatives of Revenue, Agriculture, PIO, Forest and PWD along with representatives of WUCs representing the DPs.

73. The project also envisage strengthening of WUCS constituted as per the provisions of Section 62 of the Karnataka Irrigation Act, 1965, as part of the Participatory Irrigation Management approach for sustainable O&M of the lower tiers of the canal system. The implementation of resettlement plans will be taken up with the involvement of WUCs with the support and guidance from PIOs and SSTs. The WUCs responsible for implementation of RPs will be provided training on the IR policy and the implementation of IR Policy.

## **IX. RESETTLEMENT BUDGET**

74. Detailed budget estimates for RP, if any, will be prepared by the EA through the PMU. The budget shall include: (i) detailed costs of land acquisition, relocation, and livelihood and income restoration and improvement; (ii) costs for carrying out meaningful consultations through the resettlement plan implementation and the grievance redress mechanism (ii) source of funding; (iii) administrative costs (iv) monitoring cost (v) cost of hiring consultants (vi) arrangement for approval, and the flow of funds and contingency arrangements.

75. All land acquisition, compensation, relocation and rehabilitation, administrative, monitoring and consultation costs, consultant costs, income and livelihood restoration costs will form the part of the overall financial estimates for the sub-project. All land acquisition and resettlement costs will be borne by the EA and it will ensure timely disbursement of funds for RP implementation. It is proposed that the SGOK will provide the entire fund for land acquisition and resettlement for which a separate budget head for the Program specific Land Acquisition and Resettlement shall be created with a provision of token amount in the Budget of the State Government to ensure that the resettlement plans are implemented timely. The consent of SGOK is to be sought in this regard.

## **X. MONITORING AND EVALUATION**

### **A. Monitoring**

76. Monitoring of IR activities will be undertaken by the Project Implementation Offices (PIO). The Project Implementation Offices (PIO), with the support from SSTs, will gather and maintain information on Subproject RP implementation. Monitoring Reports on Subproject RP implementation will be included in PIO's Quarterly Project Progress Report and will contain: (i) Accomplishments To-Date; (ii) Objectives Attained and Not Attained during the Quarter; (iii) Problems Encountered; and (iv) Targets for the next Quarter. The Monitoring Reports will be integrated by the Program Management Unit (PMU), with assistance from the Social and Gender specialist and Program Support Consultancy.

77. The PMU will prepare semi-annual monitoring reports describing the progress of the implementation of resettlement activities and any compliance issues and corrective actions following the involuntary resettlement monitoring indicators agreed at the time of resettlement plan approval and submit these reports to ADB.

## **B. Monitoring and Evaluation**

78. For projects with significant involuntary resettlement impacts, if any, identified during subsequent tranches, the EA will retain qualified and experienced external experts or qualified NGOs to verify the monitoring information. The external experts will be responsible for advising on safeguard compliance issues, and if any significant involuntary resettlement issues are identified, a corrective action plan will be prepared to address such issues. Until such planning documents are formulated, disclosed and approved, the implementing agency will not proceed with implementing the specific project components for which involuntary resettlement impacts are identified. External experts will monitor and evaluate the project in two phases: (i) Compliance Monitoring and (ii) Social Impact Evaluation for each Tranche.

### **1. Compliance Monitoring**

79. Compliance Monitoring of RP implementation will cover: (i) Subproject compensation and Entitlement Policies; (ii) adequacy of organizational mechanism for implementing the RPs; (iii) restoration of DPs' incomes; (iv) settling complaints and grievances; and (v) provisions for adequate budgetary support by the SGOK for implementing Subproject RPs. Completion of key RP provisions prior to awarding civil works contracts, as per ADP Policy. The external expert will assess if DPs: (i) have been provided with alternative sites for relocation; (ii) have re-established their structures; (iii) have re-established their business; and (iii) were extended assistance to restore their incomes from pre-subproject levels. The external expert will also appraise the accounting documents used in recording the payments of compensation to DPs and utilization of Resettlement Budget.

### **2. Social Impact Evaluation**

80. The external expert will conduct a one-time Social Impact Evaluation, at least six months following the completion of the Tranche. It will use appropriate investigative and analytical techniques in assessing the Post-Project socio-economic conditions of the DPs in relation to the baseline socio-economic data generated before undertaking of the safeguard implementation. The evaluation will describe any outstanding future issues that are required to bring the social safeguard into compliance with ADB's Safeguard Policy Statement covering Safeguard Requirements on Involuntary Resettlement and the Government policies, and further mitigation measures needed to meet the needs of any DPs or families perceiving themselves to be worse off as the result of resettlement. It will include lessons learned from the evaluation that may be useful in developing future policies on involuntary resettlement of DPs for similar projects.

## **ANNEXURE-1: PROGRAM DESIGN AND THE SUB-PROJECTS**

### **I. BACKGROUND**

1. The Karnataka State Water Policy (2002) has recognised that Karnataka has limited surface and ground water resources and these need to be systematically developed and properly utilized adopting new approaches for the overall development of the State. The policy has advocated for an Integrated Water Resource Management (IWRM) approach and has identified the following areas of interventions in order to achieve the policy objectives:

- (i) Institutional arrangements and governance.
- (ii) Multi-sectoral integrated water resources management using hydrological boundaries.
- (iii) Water allocation, rights and cost recovery for O&M.
- (iv) Participatory water resources management as well as the involvement of the private sector
- (v) Catchment and command area management
- (vi) Disaster management
- (vii) Research and training

2. Though, the policy incorporates many IWRM principles, it lacks explicit focus on aspects like, (i) service delivery; (ii) decentralization and subsidiarity; (iii) effective integration of rain, surface and groundwater management; (iv) target based management actions; (v) explicit provision of water for the environment; (vi) management of water supply security; (vii) organizational restructuring to separate regulatory, management and operational functions; (viii) recognition and involvement of the wide range of stakeholders; and, (ix) provision of forums for identifying issues, establishing priorities and resolving conflicts.

3. In view of the increasing concern of the SGOK over the issues related to water scarcity and need for improved management of water resources, the SGOK has requested financing from the Asian Development Bank (ADB) to enhance water security in selected basins. The Government of India, SGOK and ADB agreed to prepare the Karnataka Integrated and Sustainable Water Resources Management Investment Program (KISWRMIP) for this purpose where there is increasing water stress due to rapid economic growth and future competing needs for water supply and industry. An integrated water resources management (IWRM) approach is required to meet increasing water demand while promoting its judicious use and protecting human water needs and river environment. Greater efforts will be required to improve efficiency and sustainability in water use, particularly for irrigation (which uses 85% of abstracted water), urban water supply and sanitation (WSS), industry and the environment.

### **II. DESCRIPTION OF THE INVESTMENT PROGRAM**

4. The KIWRMIP aims to improve the sustainable management of increasingly scarce water resources in selected river basins in the State of Karnataka in India. It will establish and strengthen state and basin level institutions and support adoption of the principles of IWRM. Investment support will be provided to modernize existing irrigation infrastructure to improve irrigation service delivery and to expand urban WSS services in selected secondary towns. Water sector organisations including relevant departments, government think tanks, water service providers, irrigation Water User Cooperative Societies (WUCs), and water users will be strengthened to enhance efficiency, productivity and sustainability in water use. Innovations in technology and financing modalities—such as micro irrigation and public private partnership

(PPP), will also be implemented in one or more pilot sub basins to demonstrate the potential for replication in additional basins in Karnataka.

5. The KISWRMP is targeted to improve water resources management for enhanced access and security of water supply in the selected river basin in Karnataka. The Outputs from the project irrigation component are:

- (i) Irrigation infrastructure for about 260,000 ha modernised to enable more efficient and equitable operation
- (ii) Operation of about 360,000 ha improved by provision of flow measurement and telemetry to provide real-time knowledge of operation
- (iii) Capacity building of system operators and farmers in operation and maintenance to support the improvements in efficiency and equity in water use.

6. KISWRMIP is proposed to be financed through a Multi-tranche Financing Facility (MFF) so as to enable flexibility in investment decisions and timing based on the needs and constraints of the project, instead of a precise definition of investments up front as conventionally required. The Program is proposed to be implemented over 3 Tranches of 4 years each with one year overlapping period amongst preceding and succeeding tranche, thereby making the overall duration of ten years for the program. The Program comprises three major outputs addressing (i) support for strengthening of policy and institutional framework; (ii) modernisation of management of irrigation projects; and (iii) operationalisation of efficient program management systems. The matrix below presents the summary of key outputs and the projects envisaged under the Program over three Tranches.

TRANCHE 1 (years1-4)	TRANCHE 2 (years 4-8)	TRANCHE 3 (years 7-10)
<b>OUTPUT 1: AC-IWRM STRENGTHENED TO SUPPORT STATE AND BASIN LEVEL INSTITUTIONS AND POLICIES</b>		
Project 1-1: State level Policy Studies Reflect IWRM Principles	Project 1-1: IWRM Policy Studies Focussed and detailed study from T1 Development of agreed policies	Project 1-1: IWRM Policy Studies Further development and implementation of priority policies
Project 1-2: River Basin Management According to IWRM Principles	Project 1-2: River Basin Management Continuation of T1. LWMP pilot in 1 WUCS area	Project 1-2: River Basin Management Continuation of T2. LWMPs in additional WUCS areas
Project 1-3: Output Management and Coordination	Project 1-3: Output Management and Coordination Continuation of T1	Project 1-3: Output Management and Coordination Continuation of T2.
<b>OUTPUT 2: MANAGEMENT OF IRRIGATION SUB PROJECTS IS MODERNIZED</b>		
Project 2-1: Modernisation of Gondhi irrigation system	Project 2-1: Modernisation of Vijayanagara (VJN) and part of Tungabhadra Left Bank Canal (TJBL) Irrigation Systems	Project 2-1: Modernisation of part of TLBC irrigation system
Project 2-2: Flow measurement for Bhadra and key irrigation systems	Project 2-2: Flow measurement with Telemetry	Project 2-2: Flow measurement with Telemetry
Project 2-3: WUCS and Agricultural Development - Gondhi Irrigation System	Project 2-3: WUCS and Agricultural Development – VJN, TLBC, aftercare for Gondhi	Project 2-3: WUCS and Agricultural Development - TLBC & aftercare for VJN
Project 2-4: Strengthening of	Project 2-4: Strengthening of	Project 2-4: Strengthening of

<b>TRANCHE 1 (years 1-4)</b>	<b>TRANCHE 2 (years 4-8)</b>	<b>TRANCHE 3 (years 7-10)</b>
Nigams and CADA.	Nigams and CADA. On-going and aftercare	Nigams and CADA. On-going and aftercare
<b>OUTPUT 3: EFFICIENT PROGRAM MANAGEMENT SYSTEMS OPERATIONAL</b>		
Project 3-1: Program Planning	N/A	N/A
Project 3-2: Program Execution	Project 3-2: Program Execution	Project 3-2: Program Execution
Project 3-3: Program Monitoring	Project 3-3: Program Monitoring	Project 3-3: Program Monitoring

7. As evident from the matrix above, the proposed investment program aims to demonstrate the IWRM using river basin approach in a comprehensive manner including strengthening the policy framework and institutional structures, both for government agencies (Nigams/ CADA) and the institutions of people/ beneficiaries (WUCs) for promoting participatory irrigation management; operationalisation of systems and processes for efficient program planning, execution and monitoring; and modernization of canal irrigation systems including putting in place the flow measurement devices/ structures, physical improvements and rehabilitation of the canal irrigation systems (both the canal and the associated structures/ infrastructure); and agriculture development in the command area involving interventions for crop diversification, use of alternate irrigation technologies (drip irrigation etc), improved access to agricultural support and infrastructure.

#### **A. Modernization of the Canal Systems**

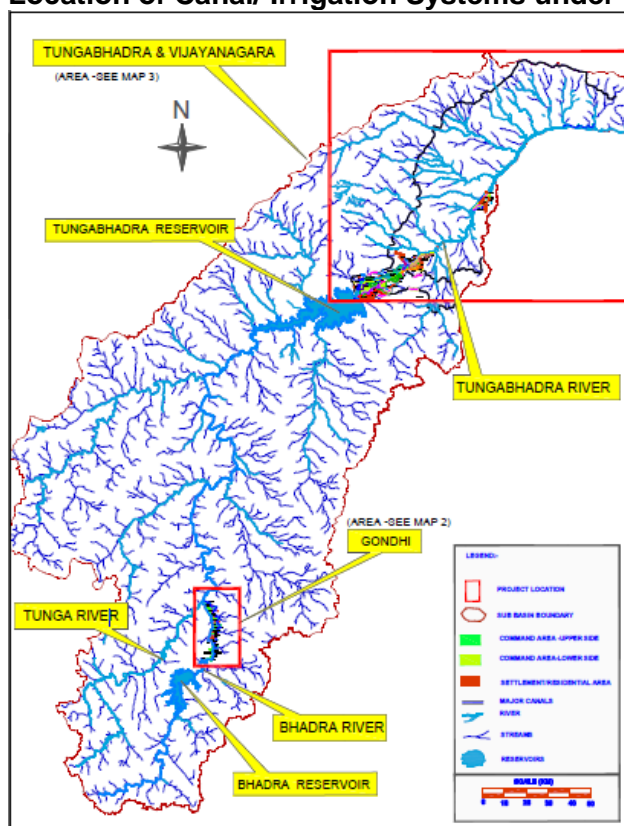
8. Amongst the envisaged program components, irrigation modernization and command area development components have been examined from the perspective of involuntary resettlement and indigenous people.

9. The irrigation modernisation component contains four main sub-projects:

- (i) Modernisation of the Gondhi irrigation system (about 4,600ha)
- (ii) Modernisation of the Vijayanagara canal system (about 11,000 ha)
- (iii) Modernisation of the Tungabhadra left bank canal system (about 244,000 ha)
- (iv) Provision of flow measurement and telemetry on the main irrigation systems in the sub-basin

10. The details of the above irrigation systems covering the technical aspects are illustrated in Appendix 3B Volume 2 of this report and the location of these systems in the context of the river basin is shown in Figure-1 below.

**Figure-1: Location of Canal/ Irrigation Systems under KISWRMIP**



11. The specific aspects for the modernization of each sub-project envisaged under the program are briefly given below.

### **1. Modernisation of the Gondhi Irrigation System (Tranche-1)**

12. The modernisation vision for the Gondhi canals is envisaged to involve:
- (i) Modification and improvement of the Gondhi canals to suit future water delivery requirements including modification of on-line tanks to provide actively managed storage;
  - (ii) Flow measurement (with automatic data transmission) at key points to inform improved operation supplemented by volumetric flow recorders at the outlets to support charging of WUCS by volume;
  - (iii) Operation of the system by making use of the return flows from the Bhadra command area when available and providing specific releases if these return flows are insufficient;
  - (iv) Extensive improvements to the command area distribution systems to improve distribution efficiency and flexibility. Gravity supplied piped distribution systems where slopes are sufficient to provide driving head are recommended in order to enhance distribution flexibility and minimise the impact of distribution infrastructure on agriculture;
  - (v) Develop managed conjunctive use of canal water, water stored in tanks and pumped groundwater and undertake small pilots of pressurised irrigation using gravity supply from the main canal with possible interlinking to existing drip irrigation that uses groundwater;



- (vi) Development and support of WUCs to build their capacity to operate and maintain the systems downstream of the outlets and contribute to improved overall system operation;
- (vii) Capacity development of operation and maintenance staff as needed for their future role of providing efficient and timely supplies of water to the users.

## **2. Modernisation of the Vijayanagara Canal System (Tranche-2)**

13. The modernisation vision for the Vijayanagara canals is envisaged to involve:
- (i) Development of the linkages between the cluster of canals on the right bank downstream of the dam to maximise the area that is irrigated directly from the dam and for which water distribution can be easily measured and controlled.
  - (ii) Making use of the more modern Tungabhadra canals, where feasible, to provide measured and managed water either as return flows from the Tungabhadra command area and/or specific releases if these return flows are insufficient;
  - (iii) Modification and improvement of the Vijayanagara canals and, where necessary, their anicuts, to suit future water delivery requirements;
  - (iv) Flow measurement (with automatic data transmission) at key points (this will become a subset of providing this technology for the whole Tungabhadra system);
  - (v) Major improvements to the command area distribution systems to improve distribution efficiency and flexibility. Gravity supplied piped distribution systems where slopes are sufficient to provide driving head are recommended in order to enhance distribution flexibility and minimise the impact of distribution infrastructure on agriculture;
  - (vi) Development and support of WUCs to build their capacity to operate and maintain the systems downstream of the outlets and, preferably the entire smaller canal systems, in order to contribute to improved overall system operation;
  - (vii) Capacity development of operation and maintenance staff as needed for their future role of providing efficient and timely supplies of water to the users.

## **3. Modernisation of the Tungabhadra Left Main Canal (Tranche-2 and Tranche-3)**

14. The long-term vision for the Tungabhadra left main canal includes:
- (i) Initially provide a basic flow measurement and telemetry system for the main canal network. This network will be later expanded;
  - (ii) Provide additional storage on main canal where feasible;
  - (iii) Upgrade distributaries and control structures (where not already carried out) to facilitate better control and distribution of water;
  - (iv) Major improvements to the command area distribution systems to improve distribution efficiency and flexibility. Gravity supplied piped distribution systems are recommended where slopes are sufficient to provide driving head in order to enhance distribution flexibility and minimise the impact of distribution infrastructure on agriculture;
  - (v) Development and support of WUCs to build their capacity to operate and maintain the systems downstream of the outlets in order to contribute to improved overall system operation;
  - (vi) Capacity development of operation and maintenance staff as needed for their future role of providing efficient and timely supplies of water to the users.

15. It is envisaged that improvement of the TLBC system will be from upstream to downstream and engineering works will be agricultural initiatives (such as SRI paddy cultivation) to reduce water usage in order that more water becomes available for downstream users. The available funding is unlikely to be sufficient for the whole TLBC system and, at this stage it is assumed that about half can be improved under the project.

## **B. Command Area Development and Strengthening of WUCs**

16. The primary objective of CADA is to improve water use efficiency through integrated area development in the irrigation command, including modernisation of the distribution system, the provision of drainage and the maintenance and operation of both the distribution and drainage systems. On-Farm Development (OFD) is an integrated process of leveling and shaping the land for smooth flow of water, constructing field irrigation channels, providing drainage facilities, forming the farm roads and realigning the field boundaries through appropriate consolidation of holdings. Thus, OFD includes works, such as field channels, land leveling, field drains and conjunctive use of surface and groundwater sources; introduction of rotational system of water distribution (RWS) to ensure equitable and timely supply of water to each and every farm holding; and evolving and propagating crop patterns and water management practices appropriate to each command area.

17. WUCS at different levels are expected to be actively involved in: (i) maintenance of irrigation system in their area of operation; (ii) distribution of irrigation water to the beneficiary farmers as per the roster system (iii) preparation of water demand and collection of water charges; (iv) resolve disputes among the members and WUCs; (v) monitoring flow of water in the irrigation systems.

18. The WUCS work plan including the CAD works and agriculture development are proposed to be prepared by the respective WUCS with assistance from the SST proposed to be deputed under the program. For the CAD works, actual layout of the field irrigation channels, field drains and other OFD works will be finalized with the WUCS and farmers. Similarly, agriculture development plan for each WUCS will be prepared in consultation with the farmers. Based on the program agriculture strategy and interventions and the current cropping practice in the WUCS area and in discussion on desired / willingness to change by the farmers, a detailed agriculture development plan proposing the seasonal cropping pattern is envisaged to be prepared in participatory manner with the WUCS. The program activities also include identification of the potential for improved agriculture practice with reference to field characteristics such as soil type, land level, improved agronomic practices to be implemented, the training and demonstration program (Farmer Field Schools, etc.) for the farmers on the new practices, the improved agricultural inputs and their possible source for farmers to purchase from, etc.

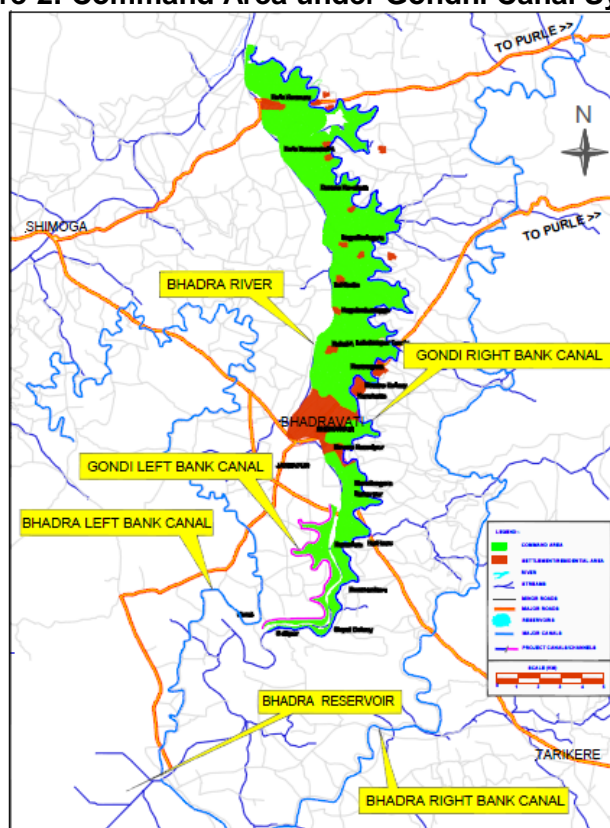
19. As part of the overall program design, it is proposed to prepare a participatory training program for the WUCS for institutional strengthening, on-farm water management, project performance monitoring, and identify ideal locations for setting up field training centers. Training modules shall be developed in topics including: (i) WUCS role, responsibilities and financial management, (ii) Irrigation Management, (iii) Water Management in different cropping systems, (iv) SRI paddy, Farm mechanization and field visit, (v) Improved Cropping Systems including IPM bio-fertilizers organic farming etc, and, (vi) Livelihoods management under WUCS.

### **III. INTERVENTIONS UNDER TRANCHE-1: MODERNIZATION OF THE GONDHI IRRIGATION SYSTEM**

20. The Gondhi irrigation system comprises two canals supplied from the Gondhi Anicut (weir) on the Bhadra river about 14 km downstream of Bhadra dam. The anicut and the right bank canal are reported to have been completed in 1926 and the left bank canal was completed in 1954. The main canals are contour canals and the height above the river increases with distance downstream. As contour canals, the alignments are not straight: The tail of the right main canal is less than 30km from the anicut.

21. The system has deteriorated and water is no longer able to pass along the whole length of the right main canal resulting in the tail area of the Gondhi system being dependent on return flows from the Bhadra system. There are three aqueducts on the right main canal where it crosses over major drainage channels. All other drainage flows enter the main canal. This is, at best, an unreliable source of water and will reduce in the future as the Bhadra system is managed more efficiently. There are 20 tanks within the right bank command area. Some of these are in-line storage where the canal crosses a valley on an embankment but most are within the command area. One of these tanks, Koppa Dodakere, commands about 260ha and has gated outlets to enable active management of supply to its command area.

22. There are about 150 pipe outlets directly from the main canals. Some of these have gates but they are never operated. The other outlets have no gates at all. The result is uncontrolled release of water which may be in excess of irrigation requirements. There is an access track on the side the canal adjacent to the command area. It is proposed to reduce the water allocation for the Gondhi system from 87.80 Mm<sup>3</sup> (3.10 TMC) to 73.8 Mm<sup>3</sup> (2.60 TMC) thus making 0.5 TMC available for Upper Bhadra. This is equivalent to a gross annual irrigation application of 1,600 mm over the whole command area. The Command Area of Gondhi canal System is shown in Figure-2 below.

**Figure-2: Command Area under Gondhi Canal System**

The summary of Gondhi Canal System is given below.

Particulars	Left Bank Area	Right Bank Area	Total
CCA (ha)	220	4380	4600
Main canal length (km)	14.7	74.4	89.1
Distributaries	0	16 No. / 34km	16
Cart bridges	20	86	106
DPOs on main canal	20	130	150
DPOs on distributaries		52	52
Drainage inlets	2	51	53
Relieving weirs	3	22	25
Escape sluices	0	6	6
Aqueducts	0	3	3
Tanks	0	20	20

23. The modernization of the Gondhi Irrigation System under Tranche-1 envisages upgrading this system covering an area of about 4,600ha addressing the canal system infrastructure upgrading and command area development. The intervention envisaged under the system comprise of the following components:

- (i) Improvement of canals including provision of canal lining to suit future water delivery requirements. Lining may be a combination of slip formed channel and large precast units in order to minimize the duration of canal closures
  - 74.6 km of Gondhi Right Bank and 14.50 km of Gondhi Left Bank subproject main canal lined

- (ii) Repair / replacement of all canal structures to support the future operational objectives.
- (iii) Modification of current on-line storage where feasible to become actively managed off-line storage and provision of night storage reservoirs where land can be made available.
- (iv) Provision of flow measurement at about 20 locations.
  - Automatic flow measurement and telemetry installed and hydrological data is being recorded and used by water manager
  - Flows at the measuring points along the Gondhi and Bhadra canal are within 10% of design values at all times during the irrigation seasons
- (v) Command area development works (including low pressure gravity-supplied pipe distribution where technically feasible and agreeable to the farmers)
  - 4,600 ha provided with Command Area Development works.
- (vi) Capacity development of system operations staff and water users to enable them to effectively use the flow measurement system and provide a better water distribution service.
  - 10 MOUs established (including 1 new WUCS) between WUCS and KNNL and system management handed over all WUCs
  - Farmer membership of WUCS on Gondhi system increases from 30% to 90%
  - 75% of farmers confirm receipt of their share of water
  - Water charges are volumetrically based and collections, increase from < 20% to 100%
  - WUCs receive the full government support from O & M
  - Asset management plans developed and updated annually by WUCS
- (vii) Agricultural extension and on-farm water management training to equip the farmers with the skills to use water more efficiently and sustainably. This extension would be delivered through the project's WUCS activities.
  - Household income from irrigated agriculture increased from by 40% for Tranche 1 projects.

24. Gondhi irrigation system contains at least 20 tanks. Some of these are along the main canal and were formed where the canal cuts across small side valleys. Others are within the command area. One of these tanks, Koppa Dodakere, commands about 60ha and has gated outlets to enable active management of supply to its command area. The tanks along the main canal are on-line, which mean that their water levels fluctuate with the main canal. As such, they reduce the responsiveness of the system to flow changes. It is therefore recommended that tanks are modified to enable active management of the stored water. The objective of tank modification interventions is to modify current on-line storage where feasible to become actively managed off-line storage and enhancement of existing off-line tanks for more pro-active management. At present the Gondhi main canals intercept drainage flows (both runoff from rainfall and excess flow from irrigation) from the Bhadra canal command areas. However, with better water management within the Bhadra system this source of water is expected to diminish. Within the Gondhi command area there is also potential to intercept runoff for re-use further down slope (the tanks within the command area probably do this) which raises the water use efficiency within the system. The technical assessment has recommended that this existing situation needs to be mapped and further potential for water reuse shall be identified.

25. As per the technical assessment, the possibility of providing night storage reservoirs should be investigated. These would be located downstream of outlets so that, although water can flow continuously through the outlets, irrigation in the command area would be only

undertaken in day-time, when water can be managed more efficiently and wastage reduced. Such reservoirs, however, will require land which will need the support of the beneficiaries which may not be immediately forthcoming.

26. The Gondhi command area development works will primarily comprise lined channels, low pressure gravity-supplied pipe distribution where technically feasible using UPVC or HDPE pipes and drainage where required and associate command area improvements. These interventions would be critical in the context of improved water use efficiency as it is necessary to improve the entire distribution system between head works and the crops. This involves improving the distribution system in the command area and, if necessary, supporting measures such as land levelling and drainage. There is considerable potential to upgrade the command area distribution system in Gondhi. Final distribution of water from the fixed pipe outlets could be undertaken using flexible hose. A piped system will provide several benefits including: (i) negligible land take; (ii) negligible conveyance losses; (iii) reduced opportunity for water to be drawn from points between the agreed outlets; (iv) a clearly defined rotation system for sharing the use of the pipe outlets. Part of the command area has slopes greater than 1% with land more than 10m below main canal level. This provides opportunity to mobilise sufficient pressure for micro sprinklers or drip irrigation with associated increase in water use efficiency. There may be potential for interlinking of the pressure supply from the canal system with the drip irrigation systems provided for some areca nut plantations to enable conservation of groundwater supplies for periods when insufficient surface water is available.

27. The field channels are in farmers land, and farmers participation and cooperation is critical for carrying out the work. WUCS comprise farmers who donate land for field channels and accordingly the strategy for contracting the works related to field channels has been included under the procurement plan under the program. In order to achieve the targeted objectives and the performance indicators for the Tranche-1 of the Program, it is proposed to implement WUCS institutional strengthening process under the program over the project cycle.

28. As part of the agriculture extension and on-farm water management, the major agriculture related activities planned under the project are:

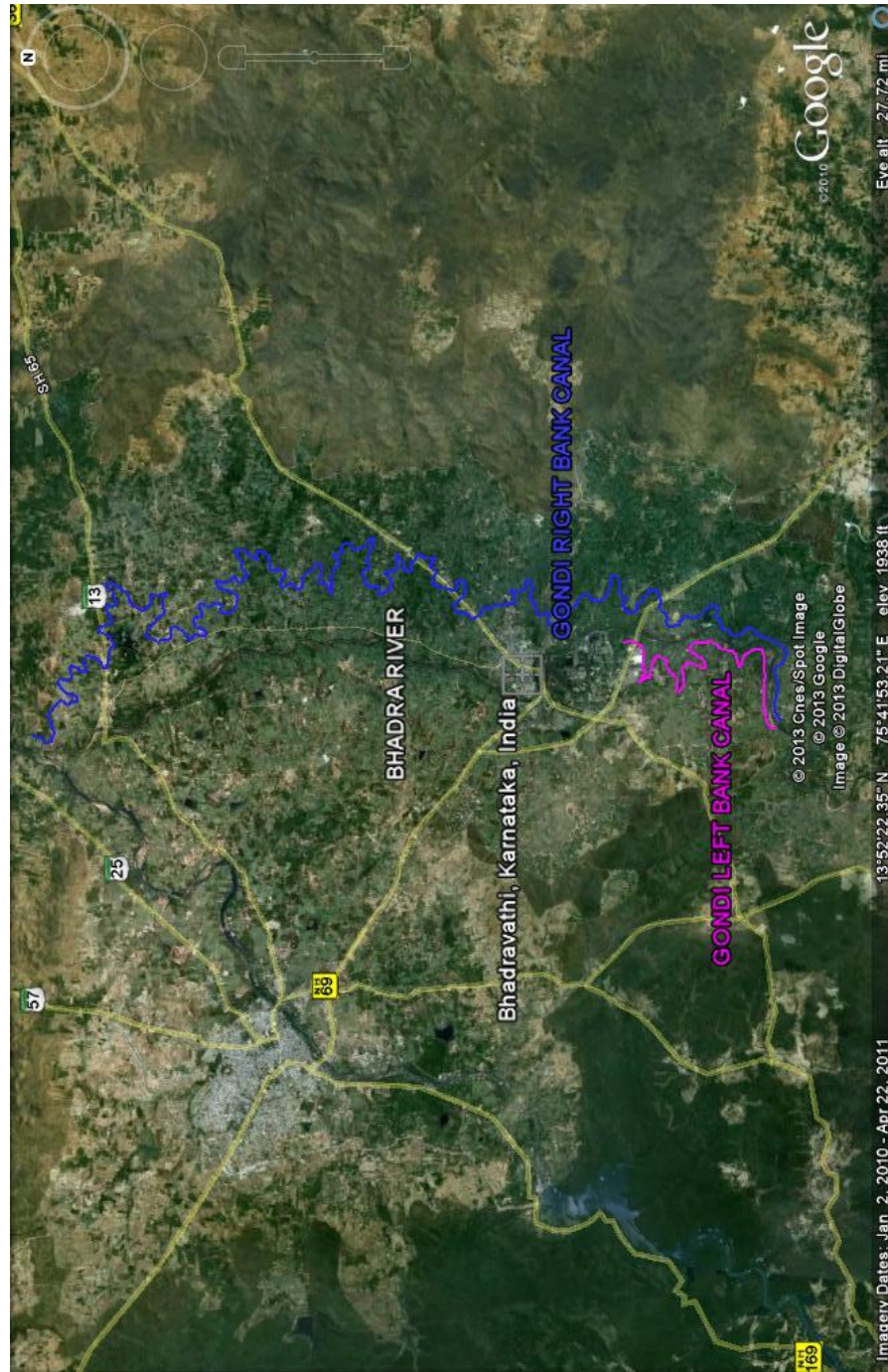
- (i) Crop diversification including by introducing short duration and market value added crops such as vegetables, flower cultivation.
- (ii) Introduction and increase in the area under SRI Paddy cultivation which will increase yields and significantly reduce water use.
- (iii) 100% coverage of the area by soil testing, balanced fertilizers, use of micro nutrients and Integrated Pest Management. This should at least offset any increase in agrichemical use and it should reduce from the current levels. It should reduce the current applications of fertilisers which are said to exceed recommended levels.
- (iv) Adoption of rice (Kharif) following pulses (Rabi) cultivation
- (v) Increase in area of crops under micro irrigation which will reduce water runoff and recharge of groundwater in the Rabi season
- (vi) Increase of area under horticultural crops with special focus on Arecanut, tissue cultured Banana
- (vii) Improved extension and training through WUCS to farmers to increase water saving, agricultural production, farmer profitability and environmental sustainability

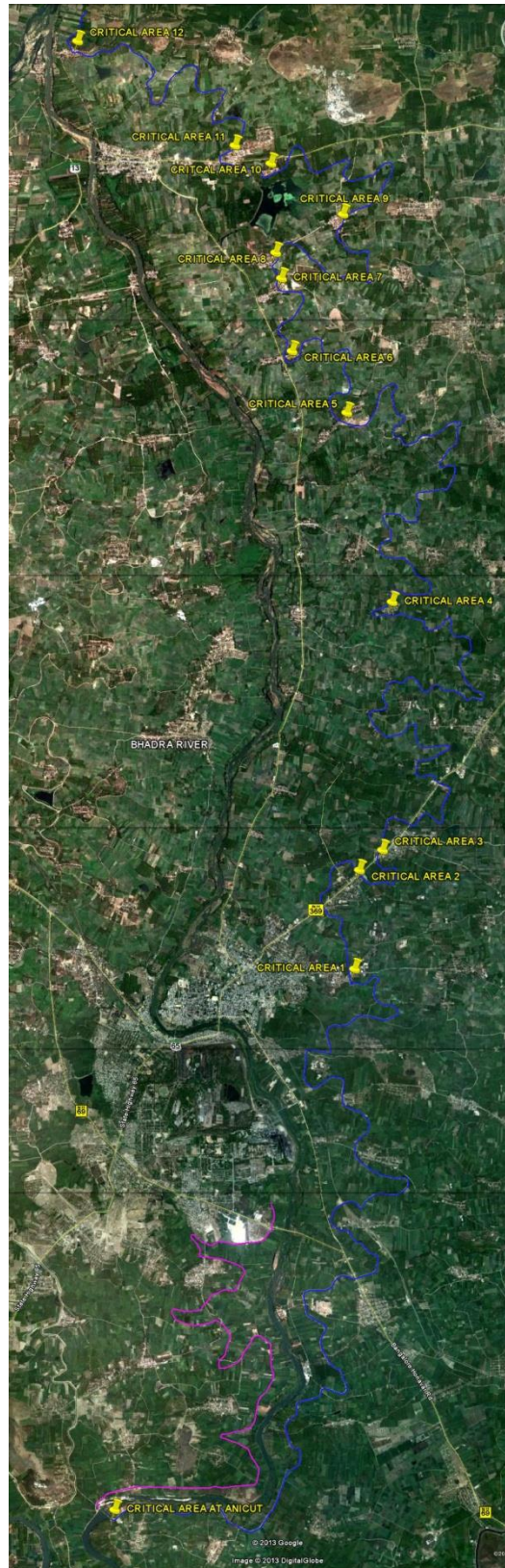
29. The Gondhi Irrigation System has been mapped on Google Earth from the perspective of identifying the critical sections of the canal system, where the IR impacts could have been



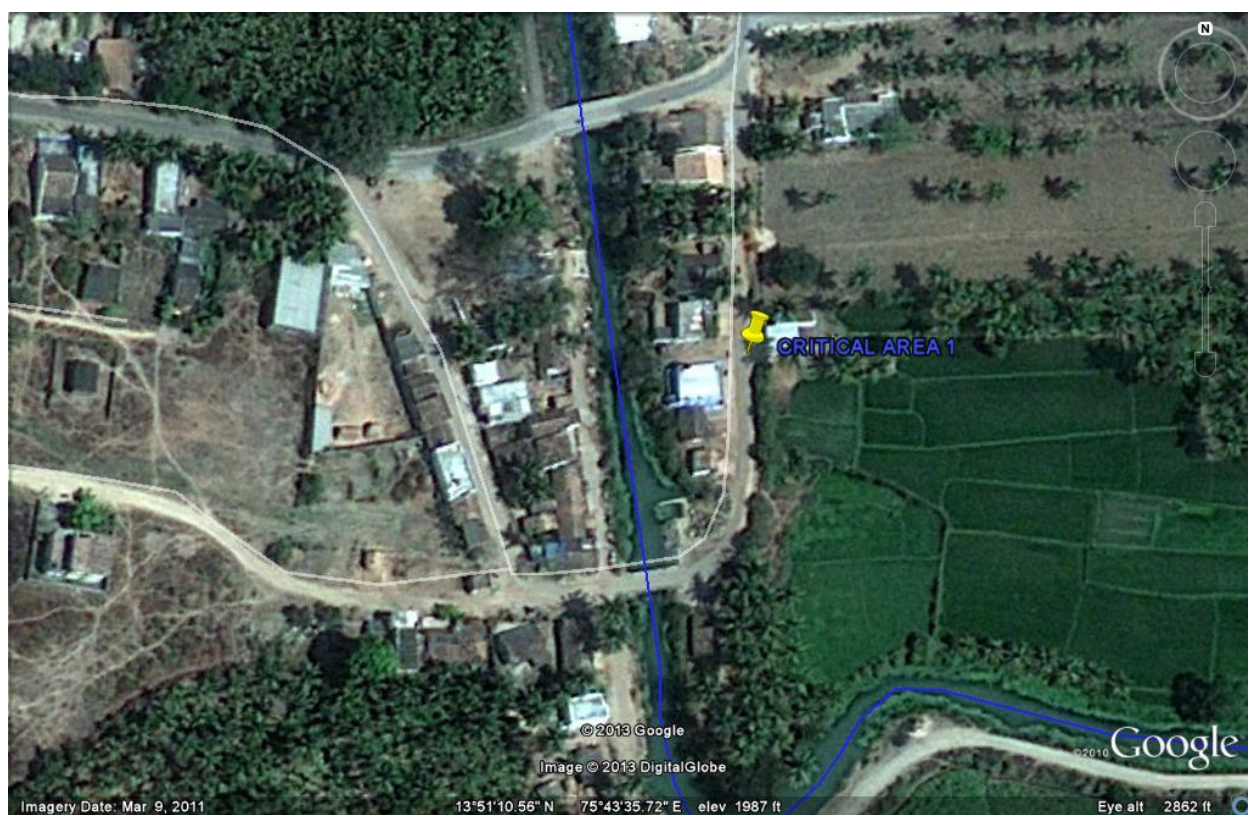
associated. The Google images showing the overall mapping of the Gondhi Canal System and the critical points is shown in the attached google images. Following the preliminary screening of the canal system using google earth, the ground level verification was carried out for these critical sections and other sections of the canals. The assessment report on the basis of field verification as part of due diligence exercise is enclosed as Annexure-2.

### MAPPING OF GONDHI CANAL SYSTEM FROM IR PERSPECTIVE

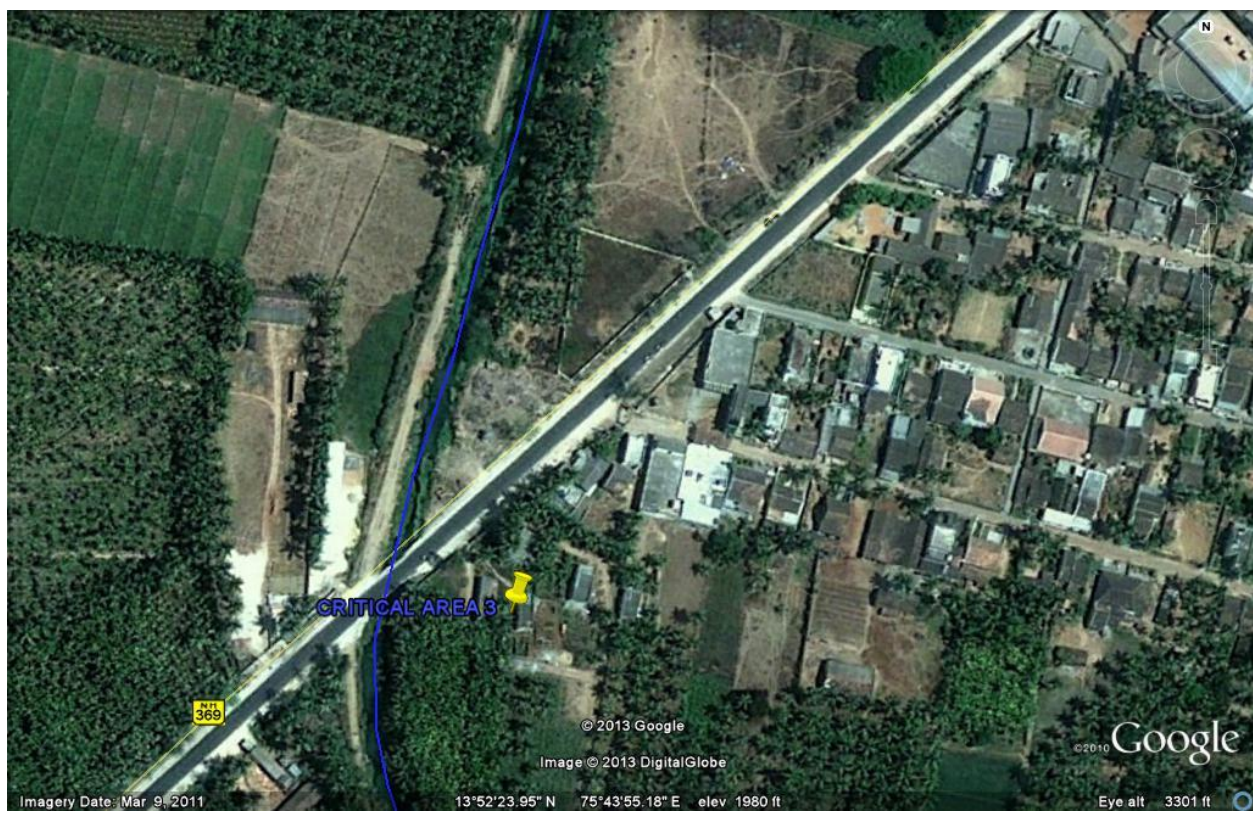


**GONDHI RIGHT BANK CANAL SYSTEM: CRITICAL AREAS FROM IR PERSPECTIVE**

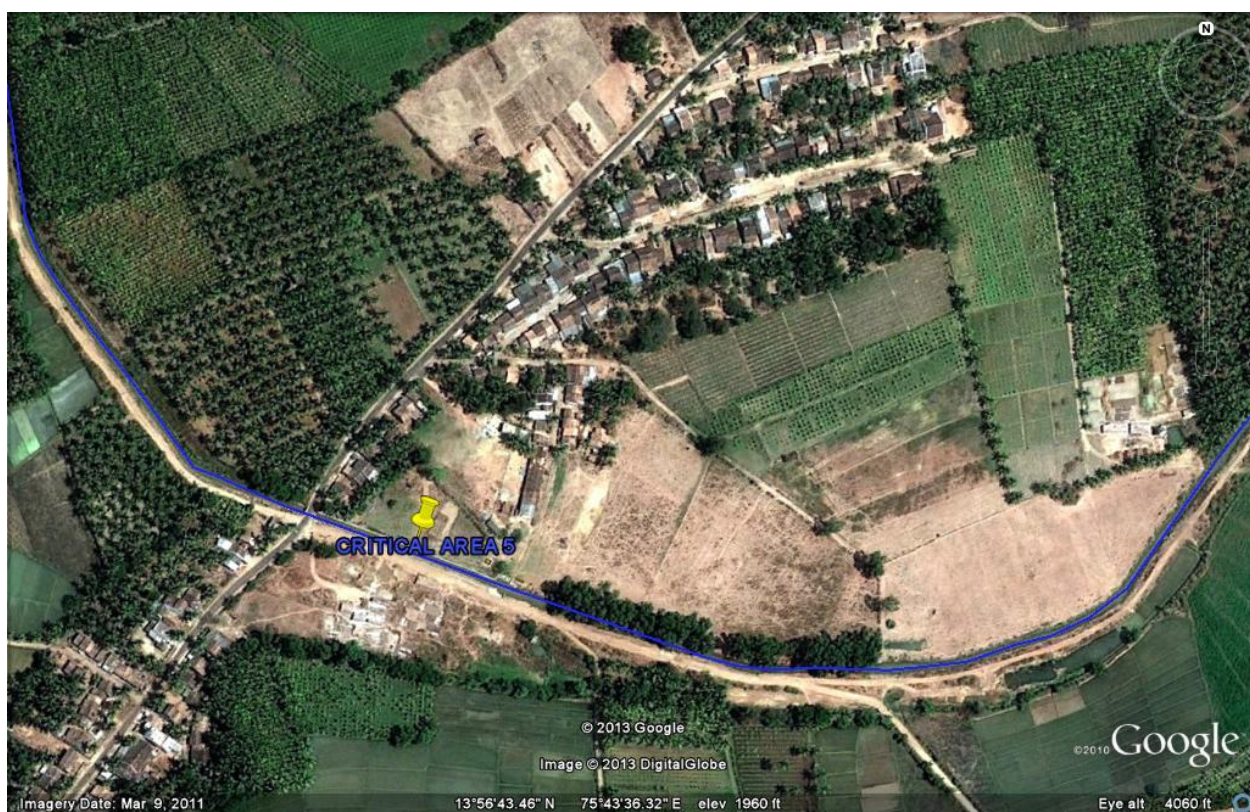






























**GONDHI LEFT BANK CANAL SYSTEM: CRITICAL AREAS FROM IR PERSPECTIVE**





## ANNEXURE-2: ASSESSMENT OF LIKELY RESETTLEMENT IMPACTS

### I. METHODOLOGY ADOPTED FOR INVOLUNTARY RESETTLEMENT IMPACTS

1. An assessment for involuntary resettlement impacts has been made for Gondhi, Vijay Nagar and TLBC Irrigation/ Canal Systems using the following methods:

- (i) interactions with the WRD and CADA officials about their experiences with regard to issues related to involuntary resettlement experienced in implementation of similar works in TLBC and Bhadra as well as availability of RoW for different irrigation/ canal systems
- (ii) observational field visits along the main canal, distributaries and sub-distributaries in the three systems proposed under the project
- (iii) Feedback from the communities received regarding the willingness of parting away their land for the project and the acceptability of the interventions proposed under the project as part of the public consultations carried out under the TA

### II. INTERACTIONS WITH WRD AND CADA OFFICIALS

2. The outcomes of the discussions with the officials from WRD and CADA with regard to their experiences of implementing similar interventions in Bhadra and parts of TLBC are summarised below:

- (i) No involuntary resettlement issues have been experienced under the modernisation interventions already made as all the improvement works have been executed within the cross sections of existing channels/ canals. Even under the proposed program, a majority of the interventions are envisaged within the existing Right of Way (RoW) so there is unlikely demand for any land acquisition or any other significant resettlement impacts.



**Intervention Made under TLBC**

- (ii) The field channels are the lowest level of the irrigation network and the works related to field channels fall under the purview of CADA. With regard to the field level channels, certain initiatives have been undertaken by SGoK to permit entrusting the responsibilities of capital works execution to WUCs (for ex. works up to Rs 5 Lakhs can be awarded to cooperative societies without tender as per the Schedule of Rates) in addition to handing over of the O&M of the field channels. The officials emphasised and the same was also supported by the



community groups that the WUCs could play an important role in the execution of improvement works for the field channels as the works directly benefit the farmers/ communities who own land. As all the field channels are in place and only require strengthening and improvement, the works are unlikely to pose issues of resettlement.



**Field Channel Improvement Works implemented through WUCs**

### **III. OBSERVATIONAL FIELD VISITS**

3. The observational field visits have been carried out to assess the ground level situation with regard to the interventions already made under TLBC and Bhadra and their impact as well as carry out a due diligence survey for assessing the involuntary resettlement impacts along the 3 canal/ irrigation systems proposed under the project. The key observations from the field visits are summarised below.

- (i) The canals under the Channel Systems are primarily contour based canals with approach roads for maintenance and the fields under the command area at the lower level. The land availability along these canal systems for the approach road ranges between 3.5-8 m at different sections which provides adequate pathways for vehicles for construction works. In some cases, the approach along the canal is available on both sides. The assessment of channels and interaction with the beneficiary communities revealed that the right of way (RoW) for the canal system seems to be available with the WRD.



**Vijay Nagar Canal System**

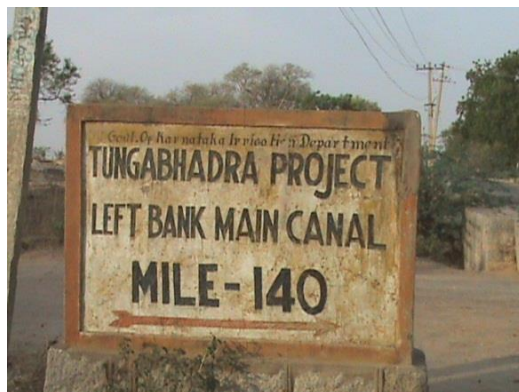


**Gondhi Irrigation System**



**TLBC System**

- (ii) It has been observed that water pipelines are crossing the canal sections and are laid on the canal bed, which would require special attention during the execution of lining works.
- (iii) As part of the overall approach, the other activities anticipated include strengthening of the existing linkages between the different canal systems within the sub-basin including improvements in the tanks/ ponds. Some of these ponds/ tanks areas have been encroached upon for the purpose of farming. In other cases changes to dam operation could increase water levels and therefore result in peripheral flooding. These could potentially have certain impacts on the livelihood issues. The technical feasibility for these is yet to be established and hence it is difficult to assess the likely impacts in terms of the land requirement. However, any such interventions are not envisaged in Tranche-1 as per the investment plan proposed for Tranche-1.
- (iv) In certain sections especially where canals are passing through urbanised / habitation areas or are along the road, scattered temporary as well as permanent constructions occur along some canal banks. These are unlikely to affect the implementation of the project activities as increased cross sections are not envisaged under the project.



**TLBC System:  
Temporary Constructions on Periphery of Canal RoW**



**Gondhi Irrigation System: Rural  
House along Canal outside RoW**



**Vijay Nagar Canal System:  
Constructions along Canal Section  
running parallel to Road**

4. The assessment of the sub-projects under consideration with regard to the projects interventions envisaged and the ground level situation clearly reveals that direct resettlement impacts are unlikely. A very minimal extent of temporary impacts may be involved especially if there are establishment of construction camps, although this is not envisaged at this stage and would be confirmed with detailed planning as there are existing construction camp sites available in the command area. Similarly, as part of the overall IWRM approach the possibilities of on-line storage systems and the night storage reservoirs, if found technically feasible, after the detailed assessments are made during Tranche-1, the likely impacts in terms of land requirements and involuntary resettlement would need to be established. The costing for Tranche-1 has not considered any investment towards on-line storage and night storage reservoirs.

#### IV. PUBLIC CONSULTATIONS-FEEDBACK FROM THE COMMUNITIES

5. Public consultations were carried out in all the three sub-projects and the communities were shared the possible set of interventions envisaged under the project. The initial consultations were carried out by the team of social expert, agriculture expert and resettlement expert in a few sample places jointly and further consultations were carried out by the Social Team. The inputs of public consultations received from the Social Survey team are enclosed as Annexure-3 for the three sub-projects. The outcomes of the consultations especially with regard to the acceptability of design options and willingness to part away the land for the works are summarised below.

- (i) The communities were explained about the possibility of using pipe based distribution system under the project. There has been a mixed response in terms of the acceptability of the system. The communities in the areas having acute scarcity of irrigation water, especially in the tail end, have responded on the positive side with a hope to have improved water availability. The communities on the head end have not shown very high interest as they are not facing this shortage. The other key concern expressed by the communities in use of pipe based system is with regard to the water requirements for domestic and livestock.
- (ii) The options of reservoir based storage system (night storage reservoirs and online storage systems) were discussed with the communities. The feedback from the communities is that the systems should be designed in a manner so that the requirements for land acquisition is not involved as far as possible as people are not willing to part away with their lands.
- (iii) The major reasons highlighted by the community members during consultations with regard to lack of willingness to part away the land were small size of holdings<sup>9</sup> available for sustenance. The other reason indicated by the community for lack of willingness to part away with their land was huge variations in the market values of land and the land rates notified by the government. The land values as per the government notified values were collected for Distributary No. 54 and 76 of TLBC which mainly falls in the Sindhanur and Manvi Blocks of Raichur District and spreads across 51 and 28 villages respectively. The estimated market values of land as notified by the SGoK for these villages is summarised below, whereas the prevailing land values (market rates) ranges between 0.50 – 1.5 Million INR in the villages, which are nearly 2 to 3 times the notified values. The communities were informed about the IR Safeguard Policy of ADB and the concept of replacement value for land. Even with compensation at replacement value/ market value, communities expressed lack of willingness as there are very limited economic opportunities other than agriculture in these rural areas and emphasised the need for designing project interventions by avoiding land acquisition.

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<sup>9</sup> The average size of land holding ranging between 1.29 Ha in Shimoga district to 2.29 Ha in Raichur District amongst all the project districts






Distributary No.	Land Value Range as per Type of Land (in Million INR/ Hectare)		
	Un-irrigated/ Dry, No Source of Irrigation	Irrigated/ Wet (Assured Water Supply from Govt. Tanks/ Canals), Single Crop of Paddy	Irrigated/ Wet (Assured Water Supply from Govt. Tanks/ Canals), Double Crop of Paddy
54	0.089-0.146	0.185-0.405	0.264-0.486
76	0.099-0.173	0.148-0.371	0.284-0.568




### ANNEXURE-3: OUTCOMES OF PUBLIC CONSULTATIONS UNDER KISWRMIP




#### A. Public Consultations at TLBC




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
1.	04/06/2012, Kareguda	20-25 including 5 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about modernization works and were requested to provide their opinion regarding piped water supply system for irrigation.</li> <li>The major issues flagged by the villagers included: insufficient provision of irrigation water by the WRD especially during summer months, overdrawn of canal water by the head reach farmers, absence of sanitation and drainage facility and lack of good physical infrastructure facilities.</li> <li>The villagers rely on underground water source for growing rabi crops, resulting in lowering of water table in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The community expressed their willingness to participate were content with the project. They were also open to the idea of piped system. They felt that water supply for irrigation was their topmost need and as tailenders they would really benefit from the project</li> </ul>
2.	04/06/2012, Mustoor	20-25 including 5 women	<ul style="list-style-type: none"> <li>The main issues highlighted by the villagers were: water scarcity/ inconsistency for irrigation purpose (summer months) and inadequate sanitation coverage etc.</li> <li>The women raised the issues related to provision of adequate sanitation facilities to all and provision of more stand posts for safe drinking water supply, so that they could save time, by travelling less.</li> <li>The underground water table in the village has lowered down to 800 feet and accounts for poor water quality with high TDS content.</li> </ul>	 <ul style="list-style-type: none"> <li>The local stakeholders were felt that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul>
3.	05/06/2012, Hirekotankal	15-20 including 2 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The major issues flagged by the villagers were: water deprivation as tailenders, lack of good physical infrastructure facilities, need for strengthening the market linkages, high cost and non-availability of fertilizers and seeds on timely basis etc,</li> <li>The general awareness level of the community was found to be poor.</li> <li>The usage of excessive ground water has led to the lowering of water table in this region.</li> </ul>	<ul style="list-style-type: none"> <li>The community supported the project, but also wanted assurance from the government regarding consistency in water supply provision for irrigation purpose.</li> </ul>




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
4.	05/06/2012, Tadakal	25-30 including 1 women	<ul style="list-style-type: none"> <li>The existing socio-economic status and issues of the village was apprised by the GP members and villagers,</li> <li>It was revealed that the villagers faced problems of water supply during the summers as tailenders.</li> <li>The villagers were receptive to the idea of piped system and agreed to cooperate.</li> <li>It was revealed that double cropping was practised in the head reach of the distributary, while single cropping pattern was practised at the tail end, due to unavailability of water.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project.</li> </ul> 
5.	08/06/2012, Chikaltarvi	20-25 including 7 women	<ul style="list-style-type: none"> <li>It was revealed that the villagers faced problems of water supply during the summers as tailenders as they were carrying out double cropping.</li> <li>The major issues flagged by the villagers were: water deprivation as tailenders, lack of good physical infrastructure facilities, need for strengthening the market linkages, high cost and non-availability of fertilizers and seeds on timely basis etc,</li> <li>Women raised the issues related to provision of adequate sanitation facilities to all and provision of more stand posts for safe drinking water supply, so that they could save time, by travelling less.</li> </ul>	<ul style="list-style-type: none"> <li>A broad consensus was reached that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 
6.	08/06/2012, Devipur	30 including 6 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The existing socio-economic status and issues of the village was apprised by the GP members, villagers, anganwadi workers, WUCS president etc</li> <li>It was revealed that 90% of the household were dependent on water from the wells.</li> <li>Women raised the issues related to provision of more stand posts for safe drinking water supply, so that they could save time, by travelling less.</li> <li>The general awareness of the local community was poor.</li> <li>The main crops grown in the village includes cotton, sunflower and jowar and majority practiced single cropping pattern .</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project.</li> <li>They felt that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 

Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
7.	12/06/2012, Sujebal	20-25 including 3 women	<ul style="list-style-type: none"> <li>The major issues flagged by the villagers were: water deprivation, water shortage during summer months and over usage of water by the head reaches farmers, limited support of extension and credit services and high labour costs.</li> <li>The water supply provision is being managed by Gram Panchayath with 30 percent coverage and remaining households are dependent on public taps/stand posts</li> </ul>	<ul style="list-style-type: none"> <li>The community was sensitised about the project and the villagers were content that the government interventions would aid in improving the farm incomes</li> </ul> 
8.	14/06/2012, Hanwal	40 including 10 women	<ul style="list-style-type: none"> <li>The villagers mainly relied on canal water for irrigation purpose and carried out multiple cropping. As the main crop grown by the villagers was paddy, they expressed their concerns regarding systematic water release from the upper reaches during summers.</li> <li>The villagers were not very receptive to the idea of piped system as they were not facing any water shortage and they preferred an open system, so that they could have direct access to water for other purpose.</li> </ul>	<ul style="list-style-type: none"> <li>The community was neutral towards the project intervention activities.</li> </ul> 
9.	15/06/2012, Hagedal	21 including 6 women	<ul style="list-style-type: none"> <li>The existing socio-economic status and issues of the village was appraised by the GP members, villagers, anganwadi workers, WUCS president etc.</li> <li>The villagers were not very receptive to the idea of piped system as they were not facing any water shortage and they preferred an open system, so that they could have direct access to water for other purpose.</li> </ul>	<ul style="list-style-type: none"> <li>The community in general approved the idea of project intervention/ modernization works</li> </ul> 




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
10.	15/06/2012, Hebbal	31 including 8 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The villagers mainly relied on canal water for irrigation purpose and carried out multiple cropping. As the main crop grown by the villagers was paddy, they expressed their concerns regarding systematic water release from the upper reaches during summers.</li> <li>The villagers were not very receptive to the idea of piped system as they were not facing any water shortage and they preferred an open system, so that they could have direct access to water for other purpose.</li> </ul>	<ul style="list-style-type: none"> <li>The community was convinced that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 
11.	16/06/2012, Achamarsapur	27 including 6 women	<ul style="list-style-type: none"> <li>The main issues highlighted by the villagers related to inconsistency in water supply for irrigation purpose (summer months) and inadequate sanitation coverage.</li> <li>The villagers were neutral to the idea of piped water system for irrigation purpose. However, they felt they would be keen to participate and provide their views during finalization of design. They also felt that it would require an attitudinal change to accept such change.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards modernization works</li> </ul> 
12.	18/06/2012, Gundur	22 including 4 women	<ul style="list-style-type: none"> <li>The existing socio-economic status and issues of the village was apprised by the GP members, villagers, anganwadi workers, WUCS president etc</li> <li>The villagers mainly relied on canal water for irrigation purpose and carried out multiple cropping. As the main crop grown by the villagers was paddy, they expressed their concerns regarding systematic water release from the upper reaches during summers.</li> <li>The main issue flagged by villagers related to insufficient sanitation coverage and poor rural infrastructure and credit facilities.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project.</li> <li>They felt that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
13.	19/06/2012, Challur	23 including 5 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The main issues highlighted by the villagers were inconsistency in water supply for irrigation purpose and need for strengthening of rural infrastructure.</li> <li>The villagers were neutral to the idea of piped water system for irrigation purpose. However, they felt they would be keen to participate and provide their views during finalization of design. They also felt that it would require an attitudinal change to accept such change</li> </ul>	<ul style="list-style-type: none"> <li>The community in general approved the idea of project intervention/ modernization works</li> </ul> 
14.	21/06/2012, Turvihal	25 including 4 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The villagers also faced problems of drinking water during Summers and depended on the village pond. The other issues included lack of good physical infrastructure facilities, need for strengthening the market linkages, high cost and non-availability of fertilizers and seeds on timely basis etc,</li> <li>Women raised the issues related to provision of adequate sanitation facilities to all and provision of safe drinking water supply near to their homes, so that they could save time, by travelling less.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project.</li> <li>They felt that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 
15.	23/3/2012, Budihal	25-30 including 9 women	<ul style="list-style-type: none"> <li>The focus group discussion was held in the village to comprehend the ground condition of the rural households.</li> <li>The major issue raised during the FGD were insufficient provision of safe drinking water, dependence on village pond for drinking as well as carrying out HH activities, absence of sanitation coverage and lack of proper transport facilities and dependence on middle men for market facilities.</li> <li>The villagers felt that modernisation works along with controlling the water usage by upper reach farmers would help in improving their current status.</li> </ul>	<ul style="list-style-type: none"> <li>The villagers gave positive response towards the project. They expressed that water availability will contribute in improving the livelihood, health, hygiene and gender conditions.</li> </ul> 




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
16.	25/4/2012, Nelahal	30-35 including 8 women	<ul style="list-style-type: none"> <li>The focus group discussion was held in the village to comprehend the ground condition of the rural households.</li> <li>Being located nearly at the tail end, the villagers faced acute water shortage for irrigation purpose and mainly carried out single cropping pattern. The small and marginal farmers worked as agricultural labourers in large farms for maintaining their income levels.</li> <li>The women expressed that they had to spend considerable amount of time in collecting water for drinking purpose from the village pond (especially during summers).</li> </ul>	<ul style="list-style-type: none"> <li>The villagers gave positive response towards the project. They expressed that water availability will contribute in improving the livelihood, health, hygiene and gender conditions</li> </ul> 
17.	23/3/2012, Madhya and Durga Camp	20-25 including 2 women	<ul style="list-style-type: none"> <li>The villagers were made aware of the project interventions and efforts were made to comprehend their issues and problems.</li> <li>The villagers of Durga camp were mainly migrants of Andhra Pradesh and mainly grew paddy and jowar in the region</li> <li>The major issue raised during the FGD were: insufficient provision of safe drinking water, dependence on village pond for drinking as well as carrying out HH activities, absence of sanitation coverage and lack of proper transport facilities and dependence on middle men for</li> <li>The villagers felt that modernisation works along with controlling the water usage by upper reach farmers would help in improving their current status.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project</li> </ul>
18.	23/06/2012, Kholabal	25-30 including 3 women	<ul style="list-style-type: none"> <li>The existing socio-economic status and issues of the village was apprised by the GP members, villagers, anganwadi workers, WUCS president etc</li> <li>It was revealed that the villagers faced problems of water supply during the summers. The villagers were practising double cropping pattern.</li> <li>The major issues flagged by the villagers were: water deprivation, lack of good physical infrastructure facilities, need for strengthening the market linkages, high cost and non-availability of fertilizers and seeds on timely basis etc</li> </ul>	<ul style="list-style-type: none"> <li>The community expressed that the project interventions would contribute directly and indirectly in enhancing their farm incomes as well as their quality of life.</li> </ul> 

## B. Public Consultations at Gondhi




Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
1.	28/8/2012, Doddagopenhalli	20-25 including 3 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues related to irrigation facilities etc</li> <li>Agriculture forms the primary occupation of the villagers, whereas dairy and milk production forms the major secondary occupation.</li> <li>The villagers heavily rely on canal water for carrying out irrigation as well as HH activities/cattle keeping etc.</li> <li>It was revealed by the villagers that the unlined canal was posing problems of sluggish water flow, weeds and spread of diseases. The major issue flagged by the villagers was lack of direct market linkages and heavy dependence on middle men and lack of proper drainage facility.</li> <li>The farmers expressed that though they were getting extension, credit support, but they felt that more extensive government support was required.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders supported the proposed project interventions and were ready to participate in making project implementation a success.</li> </ul> 
2.	06.08.2012, Thalilikatte	15-20 participants	<ul style="list-style-type: none"> <li>The group discussion was held with the WUCs president, WUCs members and villagers to cull out information on the major issues. The major issues flagged by the villagers were: shortage of irrigation water source, cleaning of the canal from time to time on payment basis by villagers themselves without any government support, getting water to the fields through alternate water source,(tanks, wells etc) which cannot be treated as a permanent solution. The water in fields is also being distributed on shift basis so as to avoid conflicts amidst farmers.</li> <li>Agriculture forms the primary occupation of the villagers, whereas dairy and milk production forms the secondary occupation.</li> <li>Besides lining, strengthening of rural roads and sanitation facilities also remained the priority areas of the villagers.</li> <li>The WUCs members expressed that they required more government support for their efficient functioning</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders welcomed the idea of project interventions as it would directly and indirectly have an impact on improving their QOL.</li> <li>The villagers requested for one RSK (RaithaSamparkakeendra) in their village</li> </ul>  


Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
3.	7/8/2012, Dasarakallahalli	20-25 participants	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions.</li> <li>The main issues of the village was the excessive seepage water from Bhadra canal, especially during the rainy season, which was leading to weakening of the residential structures, problems of water logging and rapid growth of weeds and spread of waterborne diseases.</li> <li>The awareness level of villagers towards health and hygiene was found to be poor and the villagers expressed more government initiatives must be taken to resolve and improve the village condition.</li> </ul>	<ul style="list-style-type: none"> <li>The WUCs members and villagers supported the project intervention and sought for more government initiatives in improving the agriculture and allied sector in the village</li> </ul> 
4.	Dayanakpura	15-20 participants	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions.</li> <li>The main issues of the village were related to heavy siltation and weed growth in the canals.</li> <li>The farmers were willing to participate in modernization works to be taken up for the canal system.</li> <li>The villagers mainly grow areca nut, paddy and sugar cane, and also carry out floriculture.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders welcomed the idea of project interventions as it would directly and indirectly have an impact on improving their Quality of Life.</li> </ul> 
5.	Barandoor	20-25 including 2 women	<ul style="list-style-type: none"> <li>The group discussion was held with the villagers to cull out information on the major issues faced by the farmers</li> <li>The canal water supply was available for most part of the year, however the major issues of the villagers related to unlined canal and growth of weeds, unavailability of agriculture labourers etc.</li> <li>The main crops grown by the villagers include paddy, banana, sugarcane and arecanut. Dairy farming forms one of the subsidiary occupation of the rural households.</li> <li>On the whole the farmers were pleased with the services of credit institutions.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders supported the proposed project interventions and were ready to participate in making project implementation a success</li> </ul> 

Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
6.	9/8/2012, KoreKoddegahalli	36 including 5 women	<ul style="list-style-type: none"> <li>• The existing socio-economic status and issues of the village was apprised by the GP members, villagers, anganwadi workers, WUCS president and members etc</li> <li>• It was revealed that the villagers faced shortage of water supply as they were carrying out double cropping. (paddy, sugar cane, and arecanut)</li> <li>• The villagers expressed that Gondi unlined canal was filled with silt and weeds and was poorly maintained. In addition, in many locations the bunds had collapsed, which impeded the water flow.</li> <li>• The WUCs in the village is active and as revealed by members, they were conducting monthly meeting, collecting water tax, introducing shift system for distribution of canal water.</li> <li>• Women raised the issues related to provision of adequate sanitation facilities and supply of safe drinking water.</li> </ul>	<ul style="list-style-type: none"> <li>• The WUCs members and villagers supported the project intervention and sought for more government initiatives in improving the agriculture and allied sector in the village</li> </ul> 



### C. Public Consultations at Vijaynagara Canal System

Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
1.	07/09/2012, Anegundi	25-30 including 2 women	<ul style="list-style-type: none"> <li>The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>The villagers mainly rely on the canal water for carrying out agriculture and household activities.</li> <li>The villagers are facing water problems during the summers wherein they depend on the TLBC's canal for sufficing their water needs. The villagers raised the issue that a more permanent solution was required as it was creating conflict of interests with the TLBC farmers.</li> <li>The villagers also felt that lining of the old VNC channel system would lead to systematic flow of canal water and improve their livelihood condition.</li> </ul>	<ul style="list-style-type: none"> <li>The local stakeholders expressed their pleasure towards the project.</li> </ul> 
2.	09.08.2012, Rama sagara	30-35 including 3 women	<ul style="list-style-type: none"> <li>The villagers discussed the issues related to water shortage during the summer months and their dependence on seepage water from RBC and from Kampli channel for growing crops like banana, paddy, cotton, sugar cane and vegetables.</li> <li>They supported the idea of lining /modernization works as it would not only enhance the water supply condition, but also resolve the issues related to growth of weeds, unhygienic condition etc..</li> </ul>	<ul style="list-style-type: none"> <li>The local community supported the project interventions as it would contribute directly and indirectly in improving their livelihood conditions</li> </ul> 
3.	09/09/2012, Ibrahimpura	20-25 including 4 women	<ul style="list-style-type: none"> <li>Through the FGD, the farmers were made aware of the proposed project intervention.</li> <li>The villagers raised the issues of insufficient canal water supply during summer and lack of awareness of latest agriculture technology/support extended by the Department of Agriculture.</li> <li>The farmers were carrying out double cropping pattern and were adopting the crop rotation system wherein they alternately grew paddy, sugar cane and banana.</li> </ul>	<ul style="list-style-type: none"> <li>The Community supported the proposed modernization of canal system which according to them would improve the water flow, reduce weed growth and erosion of canal sides</li> </ul> 

Serial No	Date and Place	Number of Participants	Topic & issues raised	Outcomes
4.	11/09/2012, Hulagi	30-35 including 6 women	<ul style="list-style-type: none"> <li>• The villagers were sensitized about the proposed project interventions and were requested to bring to light the issues / problems related to irrigation facilities/ cropping pattern, government support etc and provide their views and suggestions for improvements.</li> <li>• Being located at the head reach of the TLBC and water being used from drainage flow as well as water being primarily used from the Hulagi anicut from Tungabhadra river/dam, the excess of water of this channel flows back into the river.</li> <li>• The major issue raised by the villagers was the lack of O&amp;M of canal system rather the water scarcity.</li> </ul>	<ul style="list-style-type: none"> <li>• The villagers felt that modernisation works must be taken up on priority basis as heavy scouring, lack of maintenance and growth of weeds has led to the loss in flow efficiency of channel water.</li> </ul> 

#### **ANNEXURE-4: SALIENT FEATURES OF LAND ACQUISITION ACT, 1894**

1. The Land Acquisition in India is carried out using Land Acquisition Act, 1894. The Act extends to whole of India (except the state of Jammu-Kashmir. In addition, the National Government has enacted certain special purpose Acts like National Highways Act, 1956, which also provides for land acquisition for specific purpose. The Land Acquisition Act comprises of 55 Sections and is divided into the following 8 Parts:
2. **Part I- Preliminary:** This part of the Act comprises of 3 Sections (Section 1-3) covering aspects like extent, commencement and definitions.
3. **Part II- Acquisition:** This part of the Act comprises of 14 Sections (Section 4-17) covering aspects related to the land acquisition process for public purpose starting from preliminary investigations for land acquisition, notifications, objections and hearings, measurement, notices, validation of revenue records and powers to take possession and special powers in case of emergency.
4. **Part III- Reference to Court and Procedure Thereon:** This part of the Act comprises of 11 Sections (Section 18-28) covering aspects related to reference to court, matters to be considered and neglected in determining compensation, form of awards, costs and re-determination of the amount of compensation.
5. **Part IV- Apportionment of Compensation:** This part of the Act comprises of 2 Sections (Section 29-30) covering aspects related to particulars of apportionment of compensation and disputes related to apportionment.
6. **Part V- Payment:** This part of the Act comprises of 4 Sections (Section 31-34) covering aspects related to payment of compensation and mechanisms for investment of money deposited in case of disputes and payment of interest.
7. **Part VI- Temporary Occupation of Land:** This part of the Act comprises of 3 Sections (Section 35-37) covering provisions related to acquisition of land on temporary basis with associated compensation and difference as to condition of land.
8. **Part VII- Acquisition of Land for Companies:** This part of the Act comprises of 7 Sections (Section 38-44) covering provisions related to acquisition of land for private companies for specified purposes.
9. **Part VIII- Miscellaneous:** This part of the Act comprises of 11 Sections (Section 45-55) covering other miscellaneous provisions related to notices, penalty, surrender of land, appeals in proceedings and power to make rules.

#### **Some of the relevant sections of the Act are:**

10. **Section 3 (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;
11. **Section 3 (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 will be deemed to be interested in land if he is interested in an easement affecting the land;

12. **Section 3 (ee): the expression “appropriate Government”** means, in relating 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;

13. **Section 3 (f): the expression “public purpose” includes-** (i) the provision of village-sites, or the extension, planned development or improvement of existing village-sites; and list of several other activities that are defined as public purpose.

14. **Section 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 will be published in the Official Gazette [and in two daily newspapers circulating in that locality of which at least one will be in the regional language], and the Collector will 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)].

15. **Section 5 (1): Hearing of objections -** 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.

16. **Section 9 (1): Notice to persons interested -** The Collector will 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.

17. **Section 15: Matters to be considered and neglected -** In determining the amount of compensation, the collector will be guided by the provisions contained in section 23 and 24.

18. **Section 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.

19. **Section 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 will take into consideration-

- (i) first, the **market-value** of the land at the date of the publication of the [notification under section 4, sub-section (1)];
- (ii) 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;
- (iii) 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;
- (iv) 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;
- (v) 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
- (vi) 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 will 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 will be excluded.]

- (2) In addition to the market value of the land as above provided, the Court will in every case award a sum of [thirty per centum] on such market value, in consideration of the compulsory nature of the acquisition.

20. **Section 24: Matters to be neglected in determining compensation-** But the Court will not take into consideration-

- (i) first, the degree of urgency which has led to the acquisition;
- (ii) secondly, any disinclination of the person interested to part with the land acquired;
- (iii) thirdly, any damage sustained by him which, if caused by a private person, would not render such person liable to a suit;
- (iv) 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;
- (v) fifthly, any increase to the value of the land acquired likely to accrue from the use to which it will be put when acquired;
- (vi) 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;
- (vii) 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]
- (viii) [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.]

21. **Section 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.

22. **Section 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.

## **ANNEXURE-5: SALIENT FEATURES OF NATIONAL REHABILITATION AND RESETTLEMENT POLICY, 2007**

1. A National Policy on Resettlement and Rehabilitation for Project Affected Families was formulated in 2003, and it came into force with effect from February, 2004. Based on the experiences in the implementation of this policy, there were many issues which needed to be reviewed and thus, the NRRP was revised in 2007. The NRRP comprises of nine chapters including Policy; Objectives of NRRP; Definitions; Social Impact Assessments of Projects; Appointment of Administrator and Commissioner for Rehabilitation and Resettlement and their powers and functions; Rehabilitation and Resettlement Plan; Rehabilitation and Resettlement benefits for the affected families; Grievance Redressal Mechanism; and Monitoring Mechanism.

2. **Chapter 1: Policy-** It provides the basic context of the issues related with displacement of the people due to development projects, the approach of the government on the issue and the need for having the NRRP. It also clarifies that the provisions made under the NRRP are the bear minimum benefits, with flexibility for the states to provide greater benefits.

3. **Chapter 2: Objectives of the NRRP-** The objectives of the National Rehabilitation and Resettlement Policy are as follows:-

- (a) to minimize 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.

4. **Chapter 3: Definitions-** It covers the definitions relevant in context of the policy. The policy has recognized the impact of projects on the non-titleholders and the key definition in context of identifying the affected persons is defined as "*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.

5. **Chapter 4: Social Impact Assessment of Projects-** It covers the process related to carrying out the Social Impact Assessments for the projects and defines the extent of impact beyond which the SIA must be carried out as mandatory requirement; the provision related to mandatory requirement for SIA is as given below:

6. 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 in plain areas, **or two hundred or more families in tribal or hilly areas, DDP blocks or areas mentioned in the Schedule V or Schedule VI to the Constitution**, the appropriate Government will ensure that a Social Impact Assessment (SIA) study is carried out in the Proposed affected areas in such manner as may be prescribed.

7. A detailed Social Impact Assessment shall also take into account the impact that the project will have on public and community properties, assets and infrastructure and the policy requires concerned Government shall have to specify that the ameliorative measures for addressing the said impact, may not be less than what is provided under any scheme or programme of the Central or State Government in operation in the area. The SIA report shall be examined by an independent multi-disciplinary expert group, which will also include social science and rehabilitation experts. The affected communities shall be duly informed and consulted at each stage, including public hearings in the affected areas for social impact assessment, wide dissemination of the details of the survey to be conducted for R&R plan or scheme, consultations with the Gram Sabhas and public hearings in areas not having Gram Sabhas, consultations with the affected families including women, NGOs, Panchayats, and local elected representatives, among others.

8. **Chapter 5: Appointment of Administrator and Commissioner for Rehabilitation and Resettlement and their powers and functions** - It covers the aspects related to institutional arrangements to be put in place for projects involving involuntary resettlement including process for appointment of an administrator and commissioner and their role and responsibilities.

9. **Chapter 6: Rehabilitation and Resettlement Plan-** It covers the process for preparation of rehabilitation and resettlement plans including public disclosure mechanism, surveys process including time frame, identification of land for resettlement, structure of the plan, listing requirements including vulnerability, consultation processes and the process for approval of the Resettlement Plan including allocation of budget. It also covers the issues related to utilisation of land acquired and the provisions related to unutilised land from the land acquired for the project.

10. **Chapter 7: Rehabilitation and Resettlement Benefits for the Affected Families-** It covers the entitlements of the affected families having different types of impacts including the titleholders and the non-titleholders. The entitlements recommended under the NRRP are summarised in Table below:

Type of Loss	Definition of APs	Entitlement Provisions under NRRP, 2007
1. Loss of House due to acquisition	Each Nuclear Family	Allotment of free of cost house site to the extent of actual loss of area of the acquired



Type of Loss	Definition of APs	Entitlement Provisions under NRRP, 2007
		<p>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:</p> <p>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.</p>
2. Loss of House for BPL families without homestead land but residing in the affected area continuously for a period of not less than three years preceding the date of declaration of the affected area	Affected Family	<p>The Family will 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:</p> <p>Provided that any such affected family which opts not to take the house offered, will get a suitable one-time financial assistance for house construction, and the amount will not be less than what is given under any programme of house construction by the Government of India.</p>
3. Loss of Agricultural land	Affected Family	<p>For loss of entire agriculture land, the AP will be provided 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 will 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<sup>10</sup>.</p> <p>In the case of irrigation or hydel projects, the affected families will be given preference in allotment of land-for-land in the command area of the project, to the extent possible. 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.</p> <p>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</p>

<sup>10</sup> Marginal farmer defined as a cultivator with an un-irrigated land holding up to one Hectare or irrigated land holding up to half Hectare

Type of Loss	Definition of APs	Entitlement Provisions under NRRP, 2007
		<p>available in the command areas of such projects.</p> <p>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 will be borne by the requiring body.</p> <p>In the case of irrigation or hydel projects, fishing rights in the reservoirs will 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 will be given preferentially to the affected families.</p> <p>The land or house allotted to the affected families under this policy will be free from all encumbrances</p> <p>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</p>
4. Financial Assistance for Agriculture Land Losers	Each Khatedar	<p>In case of allotment of wasteland or degraded land in lieu of the acquired land, each khatedar in the affected family will 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.</p> <p>In case of allotment of agricultural land in lieu of the acquired land, each .khatedar in the affected family will 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.</p>
5. Financial Assistance for Cattle shed	Affected Family	one-time financial assistance of such amount as the appropriate Government may decide but not less than fifteen thousand rupees, for construction of cattle shed
6. Financial Assistance for Shifting	Affected Family	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. Financial Assistance for rural artisan, small trader or self employed person	Affected Person	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
8. Other Project Benefits in case of land Acquisition	Affected Family	<p>(a) 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;</p> <p>(b) arrange for training of the affected persons, so as to enable such persons to take on</p>

Type of Loss	Definition of APs	Entitlement Provisions under NRRP, 2007
		<p>suitable jobs;</p> <p>(c) 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;</p> <p>(d) 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</p> <p>(e) the requiring body will give preference to willing landless labourers and unemployed affected persons while engaging labour in the project during the construction phase.</p>
9. Training for Livelihood	Affected Person	training facilities for development of entrepreneurship, technical and professional skills for self employment
10. Rehabilitation Grant	Affected Family	<p>affected families who have not been provided agricultural land or employment will 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:</p> <p>Provided that, if the requiring body is a company authorised to issue shares and debentures, such affected families will be given the option of taking up to twenty percent of their rehabilitation grant amount in the form of shares or debentures of the requiring body, in such manner as may be prescribed:</p> <p>Provided further that the appropriate Government may, at its discretion, raise this proportion up to fifty percent of the rehabilitation grant amount.</p>
11. Compensation for Land Development Projects	Affected Family	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.
12. Subsistence Allowance	Affected Family	monthly subsistence allowance equivalent to twenty-five days minimum agricultural wages per month for a period of one year from the date of displacement.
13. Special Provision for vulnerable persons such as the disabled, destitute, orphans, widows, unmarried girls, abandoned women, or persons above	Vulnerable Affected Person	arrange for annuity policies that will pay a pension for life to the vulnerable affected persons, of such amount as may be prescribed by the appropriate Government subject to a minimum of five hundred rupees per month.

Type of Loss	Definition of APs	Entitlement Provisions under NRRP, 2007
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		
14. Emergency Acquisition	Affected Family	each affected family which is displaced will 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
15. Assistance for Linear Projects	Each Khatedar	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 will also be extended to such affected family.

11. Chapter 7 also provides special provisions for Rehabilitation and Resettlement Benefits for the Affected Families belonging to Scheduled Tribes and Scheduled Castes. The salient features of the provisions for ST/ SC population whose land is being acquired are:

- (i) Preparation of tribal development plan for projects having more than two hundred affected families including detailed procedure for settlement of land rights and restoring titles of tribals on alienated land and a program for NTFP (Non-timber forest produce);
- (ii) Gram Sabha or Panchayats at appropriate levels will be consulted for Schedule V areas and the consultations will be in accordance with the provisions of Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA Act). For projects involving more than 200 families, the Tribal Advisory Councils will be consulted;
- (iii) Each ST family followed by SC family will be given preference in allotment of land for land;
- (iv) Each ST family will get additional one time financial assistance equivalent to five hundred days minimum agricultural wages for loss of customary rights or usage of forest produce in case of land acquisition;
- (v) The ST families will be resettled as far as possible in a complete block so that they can retain their ethnic, linguistic and cultural identity;
- (vi) The families resettled outside the district will be entitled for twenty five percent higher rehabilitation and resettlement benefits in monetary terms for Sl. No. 4-7 in the Table above;
- (vii) Any alienation of tribal lands in violation of laws will be treated as null and void and the benefits would be available to the original tribal land owner; and

(viii) The reservation benefits of ST/ SC would continue at the resettlement area.

12. **Chapter 8: Grievance Redressal Mechanism-** It covers the mechanisms to be put in place for redressing the grievances of the affected families. It provides the provisions related to constitution of Rehabilitation and Resettlement Committee at the project and district levels and appointment of Ombudsman. The R&R Committees shall have representatives from the affected families including women, voluntary organizations, Panchayats, local elected representatives, etc. Provisions have been made for post-implementation social audits of the rehabilitation and resettlement schemes and plans. It also addresses the mechanisms related to inter-state projects.

13. **Chapter 9: Monitoring Mechanism-** It covers the institutional mechanisms, National Monitoring Committee and National Monitoring Cell, to be put in place at the National Level to review and monitor the progress of implementation of R&R and the mechanisms for information sharing and internal and external oversight committees.



## ANNEXURE-6: STRUCTURE OF A RESETTLEMENT PLAN

1. A resettlement plan is required for all projects with involuntary resettlement impacts. Its level of detail and comprehensiveness is commensurate with the significance of potential involuntary resettlement impacts and risks. The substantive aspects of the outline will guide the preparation of the resettlement plans, although not necessarily in the order shown.

<b>Section</b>	<b>Contents</b>
<b>Executive Summary</b>	This section provides a concise statement of project scope, key survey findings, entitlements and recommended actions.
<b>Project Description</b>	This section provides a general description of the project, discusses project components that result in land acquisition, involuntary resettlement, or both and identify the project area. It also describes the alternatives considered to avoid or minimize resettlement. Include a table with quantified data and provide a rationale for the final decision.
<b>Scope of Land Acquisition and Resettlement</b>	This section: <ul style="list-style-type: none"> <li>(i) discusses the project's potential impacts, and includes maps of the areas or zone of impact of project components or activities;</li> <li>(ii) describes the scope of land acquisition (provide maps) and explains why it is necessary for the main investment project;</li> <li>(iii) summarizes the key effects in terms of assets acquired and displaced persons; and</li> <li>(iv) provides details of any common property resources that will be acquired.</li> </ul>
<b>Socioeconomic Information and Profile</b>	This section outlines the results of the social impact assessment, the census survey, and other studies, with information and/or data disaggregated by gender, vulnerability, and other social groupings, including: <ul style="list-style-type: none"> <li>(i) define, identify, and enumerate the people and communities to be affected;</li> <li>(ii) describe the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account;</li> <li>(iii) discuss the project's impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups; and</li> <li>(iv) identify gender and resettlement impacts, and the socioeconomic situation, impacts, needs, and priorities of women.</li> </ul>
<b>Information Disclosure, Consultation, and Participation</b>	This section: <ul style="list-style-type: none"> <li>(i) identifies project stakeholders, especially primary stakeholders;</li> <li>(ii) describes the consultation and participation mechanisms to be used during the different stages of the project cycle;</li> <li>(iii) describes the activities undertaken to disseminate project and resettlement information during project design and preparation for engaging stakeholders;</li> <li>(iv) summarizes the results of consultations with affected persons (including host communities), and discusses how concerns raised and recommendations made were addressed in the resettlement plan;</li> <li>(v) confirms disclosure of the draft resettlement plan to affected persons and includes arrangements to disclose any subsequent plans; and</li> <li>(vi) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for consultation with affected</li> </ul>

Section	Contents
	persons during project implementation.
<b>Grievance Redress Mechanisms</b>	This section describes mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances. It explains how the procedures are accessible to affected persons and gender sensitive.
<b>Legal Framework</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) describes national and local laws and regulations that apply to the project and identify gaps between local laws and ADB's policy requirements; and discuss how any gaps will be addressed.</li> <li>(ii) describes the legal and policy commitments from the executing agency for all types of displaced persons;</li> <li>(iii) outlines the principles and methodologies used for determining valuations and compensation rates at replacement cost for assets, incomes, and livelihoods; and set out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided.</li> <li>(iv) describes the land acquisition process and prepare a schedule for meeting key procedural requirements.</li> </ul>
<b>Entitlements, Assistance and Benefits</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) defines displaced persons' entitlements and eligibility, and describes all resettlement assistance measures (includes an entitlement matrix);</li> <li>(ii) specifies all assistance to vulnerable groups, including women, and other special groups; and.</li> <li>(iii) outlines opportunities for affected persons to derive appropriate development benefits from the project.</li> </ul>
<b>Relocation of Housing and Settlements</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) describes options for relocating housing and other structures, including replacement housing, replacement cash compensation, and/or self-selection (ensure that gender concerns and support to vulnerable groups are identified);</li> <li>(ii) describes alternative relocation sites considered; community consultations conducted; and justification for selected sites, including details about location, environmental assessment of sites, and development needs;</li> <li>(iii) provides timetables for site preparation and transfer;</li> <li>(iv) describes the legal arrangements to regularize tenure and transfer titles to resettled persons;</li> <li>(v) outlines measures to assist displaced persons with their transfer and establishment at new sites;</li> <li>(vi) describes plans to provide civic infrastructure; and</li> <li>(vii) explains how integration with host populations will be carried out.</li> </ul>
<b>Income Restoration and Rehabilitation</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) identifies livelihood risks and prepare disaggregated tables based on demographic data and livelihood sources;</li> <li>(ii) describes income restoration programs, including multiple options for restoring all types of livelihoods (examples include project benefit sharing, revenue sharing arrangements, joint stock for equity contributions such as land, discuss sustainability and safety nets);</li> <li>(iii) outlines measures to provide social safety net through social insurance and/or project special funds;</li> <li>(iv) describes special measures to support vulnerable groups;</li> <li>(v) explains gender considerations; and</li> </ul>

Section	Contents
	(vi) describes training programs.
<b>Resettlement Budget and Financing Plan</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) provides an itemized budget for all resettlement activities, including for the resettlement unit, staff training, monitoring and evaluation, and preparation of resettlement plans during loan implementation.</li> <li>(ii) describes the flow of funds (the annual resettlement budget should show the budget-scheduled expenditure for key items).</li> <li>(iii) includes a justification for all assumptions made in calculating compensation rates and other cost estimates (taking into account both physical and cost contingencies), plus replacement costs.</li> <li>(iv) includes information about the source of funding for the resettlement plan budget.</li> </ul>
<b>Institutional Arrangements</b>	<p>This section:</p> <ul style="list-style-type: none"> <li>(i) describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan;</li> <li>(ii) includes institutional capacity building program, including technical assistance, if required;</li> <li>(iii) describes role of NGOs, if involved, and organizations of affected persons in resettlement planning and management; and</li> <li>(iv) describes how women's groups will be involved in resettlement planning and management,</li> </ul>
<b>Implementation Schedule</b>	<p>This section includes a detailed, time bound, implementation schedule for all key resettlement and rehabilitation activities. The implementation schedule should cover all aspects of resettlement activities synchronized with the project schedule of civil works construction, and provide land acquisition process and timeline.</p>
<b>Monitoring and Reporting</b>	<p>This section describes the mechanisms and benchmarks appropriate to the project for monitoring and evaluating the implementation of the resettlement plan. It specifies arrangements for participation of affected persons in the monitoring process. This section will also describe reporting procedures.</p>