



# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 03-Feb-2017 | Report No: PIDISDSA20784

**BASIC INFORMATION****A. Basic Project Data**

Country Mexico	Project ID P160570	Project Name Grain Storage and Information for Agricultural Competitiveness	Parent Project ID (if any)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date 30-Jan-2017	Estimated Board Date 24-Mar-2017	Practice Area (Lead) Agriculture
Lending Instrument Investment Project Financing	Borrower(s) Secretaría de Hacienda y Crédito Público (SHCP)	Implementing Agency SAGARPA, ASERCA	

## Proposed Development Objective(s)

Improve access to grain storage and information for agricultural producers in Mexico

## Components

Grain Storage Infrastructure and Operation  
Information for Grain Management, Markets and Monitoring

**Financing (in USD Million)**

Financing Source	Amount
International Bank for Reconstruction and Development	120.00
Borrowing Country's Fin. Intermediary/ies	60.00
Local Farmer Organizations	15.00
<b>Total Project Cost</b>	<b>195.00</b>

## Environmental Assessment Category

B - Partial Assessment

## Decision

The review did authorize the preparation to continue

Other Decision (as needed)



## **B. Introduction and Context**

### Country Context

1. The Mexican economy has been expanding at a moderate annual rate of 2.5%, similar to other OECD (Organization for Economic Co-operation and Development) countries. Private consumption has been the main driving force of economic activity on the back of stronger job creation, real wage growth, and credit expansion. However, GDP (Gross Domestic Product) growth forecasts for 2017 have lowered from an average of 2.3% to 1.4%. A challenging external environment, including lower oil prices, an uncertain policy environment related to the change of administration in the United States (Mexico's largest trade partner), and a slowdown of growth perspectives in emerging market economies, has contributed to a significant depreciation of the Mexican peso, which over the past two years has lost nearly 30% of its value against the US dollar and continues to fall. Inflationary pressures and interest rates are on the rise.
2. Government priorities have been to maintain prudent monetary, financial, and fiscal policies to create the conditions for stronger growth in the medium term, to be supported by the structural reforms under implementation, aimed at raising productivity, competitiveness and potential output growth. In the short term, fiscal austerity measures are creating the need for re-thinking the role of the public sector in many economic activities and the prioritization of public spending across competing needs. In early 2016 fiscal and monetary policy authorities announced supplementary public expenditure reductions equivalent to 0.7% of GDP (Gross Domestic Product). In early 2017, a process of redistribution of public resources from petrol price subsidies to social spending is intended to further redirect public resources although coupled with social discontent.
3. Despite Mexico's significant economic and social improvements, stagnant productivity and insufficient inclusiveness are critical causes of persistent poverty, inequality, and regional disparities. In 2014-2015, the poverty rate stood at 46% (about 55.3 million people), with a higher incidence in rural and semi-urban areas. Between 2010 and 2014, annual income of the bottom 40 percent of the population grew at a trivial 0.1%, while the annualized mean income growth over this period was just 0.5%. Poverty reduction has been unequal across the territory; 5 of the 32 states (Chiapas, State of Mexico, Oaxaca, Puebla and Veracruz) account for 56% of the extreme poor in 2014. Public policy interventions can affect productivity to improve earnings; inclusiveness to make sure that the poor and indigenous communities have access to services and market information; and sustainability so that expansion of rural development does not deteriorate Mexico's resource base.
4. In this context, the Government of Mexico is consolidating social assistance and support programs, including in agriculture and rural development, to improve efficiency and effectiveness for poverty reduction, promote productivity and leverage economies of scale. Agriculture and rural development programs have represented between 0.5% and 2% of Mexico's budget over the past decade, similar to 0.8% to 2.4% observed in other OECD (Organization for Economic Co-operation and Development) countries, and much less than other segments of the Mexican economy (7% for housing and urban development or 3% for education, for example). Although spending in the sector has been increasing in nominal terms, it has remained constant, as a percentage of the budget. However, this pattern is changing as agricultural budgets have been significantly reduced in the past



two years, forcing a process of prioritization of limited resources and a search for efficiencies in the operation of current programs.

#### Sectoral and Institutional Context

5. Agriculture continues to be an important sector in the economy, accounting for around 13% of Mexico's GDP (Gross Domestic Product), when considering the forward and backward linkages created through primary production, post-harvest agro-industrial processes and food systems. The sector employs on average 13% of the formal labor force in the country (7 million people). Almost one quarter of Mexico's population (representing more than 24 million people) live in rural areas and depend on agriculture for their livelihoods (45% of the employed rural labor force works in the primary sector). The rural poverty rate (61.6%) is far higher than the urban rate (40.6%), with rural poverty perpetuated by the low productivity of labor in the agricultural sector among other structural factors.
6. Agricultural land represents 55% of the total land area of Mexico (or close to 112 million hectares of arable land), with 5.5 million agricultural units devoted mostly to the production of cereals such as maize, wheat and sorghum. One half of the agricultural land is under communal ownership (*ejido*), which has important implication for land use, particularly in the south of the country. Although only 6% of agricultural land is irrigated, agriculture consumes 77% of water in Mexico and is a source of increasing tension, in particular in the semi-arid northern states. Limited access to credit contributes to hindering investments for boosting productivity, especially for the small producers across the country.
7. There are important geographical differences in the structure and performance of the agricultural sector in Mexico. In the South, agriculture plays an important social role for food security, while in the North it is a key driver of economic development through commercial, export-oriented agriculture. The average productivity of the sector is low in comparison with other OECD (Organization for Economic Co-operation and Development) countries and differs across regions, masking a sharp sector duality. Most agricultural producers (73%) are small (<5ha) and semi-subsistent, employing traditional, rainfed production practices, and concentrated in the Center and South of the country, working on 6% of the total arable land. Around 5% are large producers (>20ha), well-integrated, and predominantly export-oriented. Farm units with more than 100 hectares represent 2% of the total units and concentrate two-thirds of the land dedicated to agriculture. This has generated a heterogeneous sector where producers with high productivity profiles and strong market orientation coexist with low income small and medium producers with minimal level of commercial connection to local/national markets.
8. The current agricultural policy is on improving productivity, competitiveness, sustainability, and equity, while safeguarding national food security. Agriculture sector policies are set out in both the Agricultural Sectoral Plan and the Special Concurrent Program (*Programa Especial Concurrente*, PEC). The Agriculture Sector Plan is aligned with the National Development Plan, and features two overarching objectives: to guide the development of a productive agricultural sector and to ensure food security. Ministry of Agriculture (SAGARPA, Spanish acronym) programs designed to advance these objectives represented about one fifth of its 2015 budget. The plan includes five goals directly related to agriculture and food security: (a) to boost food production through investment in physical, human and technological capital; (b) to promote partnerships that generate economies of scale and add value in food production; (c) to safeguard the food supply through risk-management mechanisms;



(d) to encourage the sustainable use of natural resources; and (e) to reduce the risk of food shortages in rural areas. The PEC was created to combine different federal agriculture and rural development programs and as a mechanism for implementing the 2001 Law of Sustainable Rural Development (*Ley de Desarrollo Rural Sustentable*). SAGARPA (Ministry of Agriculture) oversees agricultural sector policy and coordinates the PEC, but it does not have authority over other ministries involved in executing PEC programs.

9. There have been fewer attempts to empower small producers to assume a more active role in the commercialization of their grains and other agricultural products. This has been driven by their small scale, diversity of production, high risk of compliance with market quality standards, and lack of financing. Moreover, current storage infrastructure of agricultural commodities in Mexico is insufficient and/or inadequate, lacking the necessary equipment and norms to determine and maintain the uniformity of the quality of production. In 2013, the overall grain (dry) storage system capacity was about 32.7 million tons, which resulted in an annual deficit of grain storage capacity when national and import quantities were taken into consideration. This reduces the ability for intertemporal arbitrage, for smoothing commercialization and consumption patterns of the grains and for distribution to where demand is high at the national level. Furthermore, the use of traditional storage has contributed to high levels of grain losses. According to SAGARPA (Ministry of Agriculture) estimates, post-harvest losses in maize, wheat and beans range between 5% and 25% of total production, due to grain humidity and related fungal and pest problems. At the micro level, where home storage and traditional structures are used, losses range between 13% and 28%, representing an important constraint to food security.
10. There are important grain storage infrastructure disparities between the central/southern states and the states located in the North of the country, where most current storage infrastructure is located. As a consequence, commercial surpluses, trade balances, financial and transportation costs affect producers differently. The four states with major storage capacity are Tamaulipas, Jalisco, Sinaloa and Guanajuato in the North. This infrastructure is complemented with modern storage facilities integrated with semi-mechanized and mechanized equipment, with a storage capacity that goes from 5 up to 50 thousand tons. These facilities are also well integrated into upstream value chains such as storage, packing, and distribution. In contrast, the states in the South lack the storage capacity and commercialization conditions to meet current market demands. The majority of existing silos and collection centers have not been modernized and lack the necessary equipment for grain conservation.
11. Access to finance is one of the biggest challenges for Mexican producers. Small and medium-sized producers have limited access to financial resources given the heterogeneous agrarian structure also linked to land tenure patterns, relying on non-traditional and informal financial services. Rural credit services are provided mostly by entities that are not connected to the regulated financial system, which implies higher financial costs for producers and also complicates the development of a credit history that would allow them to participate in commercial or development banking services. In recent years, financial services provided by commercial banks to the agricultural sector have been reduced and many institutions dedicated to agricultural promotion have been disassembled. Credit to the agricultural sector has decreased from 1.8% of GDP (Gross Domestic Product) in 1994 to 0.1% in 2012. Agricultural rural credit, training and technical provision is centered on FIRA (*Fideicomisos Instituidos en Relación a la Agricultura*) and FND (*Financiera Nacional de Desarrollo*). Beyond the need of credit for rural production activities, there is also a need for other financial services to strengthen agricultural value chains. Integrating financial products into existing agricultural



commercial systems can improve the socio-economic conditions of small and medium-sized producers.

12. A well-functioning mechanism for the registration, licensing, oversight and inspection of warehouses is an important element to ensure that warehouse receipts are acceptable collateral for financial institutions; acceptable for commodity exchange related transactions; as well as to guarantee that warehouses meet basic structural, operating and financial conditions. The actors responsible for monitoring warehouses should be well defined but can vary, depending on whether local, regional or national markets are involved. In less structured settings, the monitoring functions can be delegated to value chain actors who have the incentive to perform it well, given the valued relations they have created with producers, traders or processors. This is important in the context of Mexico where the current structure of storage is very much skewed towards larger units and where small storage units can also play an important role, especially in the South.
13. Added to these challenges is the structure and lack of transparency of Mexican agricultural markets, especially for the main crops, such as maize, which inhibit the participation of small and medium size producers. Spot price information for many agricultural commodities is very fragmented, and not readily available within and across regions or on a daily basis. Currently, reference prices available in Mexico are spot and futures prices from the neighboring USA. This has created significant information asymmetries in the sector, which have contributed towards an oligopolistic behavior by large warehouses (charging high storage costs) and a near oligopsony in the buying of grains, with 4 large companies (3 private and 1 public) dictating (low purchase) prices. Prices are set by negotiating prices between buyers and sellers by region using the Chicago futures market as a reference. This price negotiation establishes the price “basis” in relation to Chicago, which is then reflected in the forward contracts agreed between buyers and sellers. This negotiated price is a critical market distortion and the main reason why there is no price formation in Mexico. Furthermore, the reference price of Chicago is based on trading of yellow corn, while Mexico is the world’s largest producer of white corn, including many native varieties that are valued for their distinctive features. The use of a reference price from the Chicago futures market thus equalizes – and in many cases reduces – the values of many Mexican corn commodities. These market-price distortions have important economic implications as they reduce comparative advantages that Mexico can have in trading white corn with other large consumers (such as many African countries), as well as limits the development of local and regional markets for different corn varieties. Lack of a grain inventory database and user-friendly climate information further exacerbate the ability of producers, private and public entities to make decisions. This is true for maize and other important crops in Mexico.

### **C. Proposed Development Objective(s)**

Development Objective(s) (From PAD)

**Improve access to grain storage and information for agricultural producers in Mexico**

Key Results

#### ***Number of beneficiaries (men and women) using project supported grain storage facilities***

14. This indicator measures the participation of grain producers in the first stage of the grain market. “Use” will be measured by the physical delivery of grains to a project supported grain storage



facility.

*Links to higher level objective on improving food security (reduction of post-harvest losses).*

***Number of beneficiaries (direct and indirect) accessing project enabled grain market information***

15. This indicator measures the access to the key variables that the project will make publicly available. "Access" will be measured by the number of producers receiving the information either through direct access to the information platform, or by other means/through other sources.

*Links to higher level objective on improving competitiveness (reduction of transaction costs and information asymmetries).*

***Share of grain sold from project supported storage facilities***

16. This indicator measures the turnover of stored grain and hence its integration further up the value chain. It internalizes the development of infrastructure (including financing) as well as management and quality aspects of the infrastructure investments, but focuses on the result – their use.

*Links to higher level indicator of market integration and competitiveness.*

**D. Project Description**

17. The overall goal of this project is to improve the access of small grain producers to storage facilities and information, thus contributing to food security, market inclusion and competitiveness in important grain producing areas of Mexico. Each of the proposed project components will contribute to developing market conditions that enable producers to participate in a storage system that incentivizes productivity through profitable commercialization practices, reduces losses through post-harvest management, facilitates access to financial mechanisms, and differentiates prices through symmetric information to compete in national and global markets.
18. Project design, as presented in the Legal Agreement, is presented here. Project Description is provided in Annex 1.

**Part 1. (Component 1) Grain Storage Infrastructure and Operation**

19. Provision of support for the carrying out of Grain Storage Subprojects in Selected States consisting of the following activities, including:
- (a) the rehabilitation and/or upgrading of existing grain storage facilities, including collection and trade centers, and purchase and installation of required equipment; and/or
  - (b) the construction of new grain storage facilities, including collection and trade centers, and purchase and installation of required equipment.
20. Provision of support for the operation and sustainability of [the] grain storage facilities [rehabilitated/upgraded or constructed under Part 1.1 above], including:





- (a) (i) the preparation of business plans ; (ii) the carrying out of capacity building activities for grain storage facilities operators, including the preparation of capacity building materials, on the operation, control and maintenance of grain storage facilities and required equipment acquired under Grain Storage Subprojects; and
- (b) the provision of support to grain storage facilities operators and Eligible Grain Producer Organizations on the application of grain quality norms and standards through, inter alia: (i) the carrying out of capacity building activities on, inter alia, grain quality control and management on-farm; and (ii) the preparation of capacity building materials for grain quality control and management in collecting and trade center.

#### Part 2. (Component 2) Information for Grain Management, Markets and Monitoring

- 21. Provision of support for: (a) the design, operation and maintenance of an information platform on grain markets and management, including: (i) the purchase of required software and hardware and (ii) the carrying out of related capacity building activities on the use of said platform and data collection and exchange; and (b) the carrying out of dissemination activities on the information platform, including the carrying out regular user surveys.
- 22. Strengthening the commercialization linkages of grain storage facilities through the following activities, including: (a) the participation of members of Eligible Grain Producer Organizations in agricultural fairs; (b) the carrying out of pertinent analysis on, inter alia, new market opportunities, market segmentation potential, and other strategic needs to improve market penetration and returns.
- 23. Provision of support for the monitoring and evaluation of the Project.

### **E. Implementation**

#### **Institutional and Implementation Arrangements**

- 24. The Project will be implemented by SAGARPA (Ministry of Agriculture), through ASERCA. The Agency for Services toward the Commercialization and Development of Agricultural Markets (ASERCA for its Spanish acronym) is the best positioned institution to lead this work. ASERCA, a deconcentrated agency of SAGARPA, has a mandate to: 1) promote the commercialization of surpluses of maize, wheat, sorghum, soy and beans and 2) position Mexican agriculture products in global markets. The main work of ASERCA includes providing incentives for the commercialization of commodities through contract farming, production guarantees, risk coverage and incentives for storage. The agency has a budget of roughly MX\$10 billion per year, and reaches around 260,000 beneficiaries per year (or 4% of those formally employed in agriculture), many of whom are large farmers.
- 25. Under Component 1, ASERCA will enter into sub-project agreements with eligible producer organizations that are legally constituted and have experience in grain production and management. Development banks (FIRA and FND) will support project activities through the provision of financial





instruments, including partial guarantees for loans issued by commercial banks to producer associations/organizations. Commercial banks will support project activities through the provision of partial loans for rehabilitating/constructing storage infrastructure and/or for working capital for storage facilities. CIMMYT (in coordination with the MasAgro Program) will provide capacity building related to grain quality standards, grain management and traceability (under sub-components 1.2. and 2.2), as well as to the information platform development (sub-component 2.1) and for project safeguards monitoring (sub-component 2.3). FAO, Food and Agriculture Organization of the United Nations) (through the PESA Program) will support the project with grain storage facility standards, under sub-component 1.2. Furthermore, ASERCA will collaborate with other public sector agencies (such as PROMEXICO, FOCIR, FIRCO) and private sector entities (AGDs) for the development of project activities. Direct hire justifications for CIMMYT and FAO will be provided in the Operational Manual.

#### **F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

The project will target small and medium semi-commercial and commercial agricultural producers, and their organizations, in selected states, and support the rehabilitation and, where needed, construction, of small scale grain storage infrastructure, including equipment and enabling services. Based on a methodology developed to select project intervention states, prioritizing those with gaps in storage capacity, with large number of small and medium producers, but with marked productivity and market potential, 7 States were identified - Estado de Mexico, Michoacán, Veracruz, Guanajuato, Chiapas, Oaxaca and Puebla. Located in the Central and Southern parts of Mexico, these states represent different agro-ecological and socio-economic conditions, as well as structural characteristics of agricultural production and the potential for storage and commercialization of grains. Although Component 1 will be implemented in these States, information from all States will be considered for the development of the information platform under Component 2, which will be available to the public at large.

#### **G. Environmental and Social Safeguards Specialists on the Team**

Angel Alberto Yanosky, Arelia Jative Lopez Castaneda

#### **SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	This project's primary activities will be to a) increase the storage capacity and stored volume of grains in certified collection centers, b) improve the quality of these centers and the quality of grains, c) reduce post-harvest losses through improved infrastructure,



information and commercialization, and d) improve the flow of information production and market information. The project will not directly support agricultural production decisions, but may influence them through their integration into value-chains. Improvements in grain volumes will be achieved through the use of better management practices, such as conservation agriculture, more suitable to agro-biodiversity, and better post-harvest management, hence reducing grain losses, rather than through frontier expansion. No land use change activities will be supported, and no native areas (including primary forests) will be degraded, traditional crops will not be replaced by high yielding or GMO varieties, and no actions will be taken in Conservation or Protected Areas, their buffer zones.

The activities related to the physical rehabilitation of existing and/or construction of small storage infrastructure may have some environmental implications. The Environmental Assessment and Management Plan developed by ASERCA identified potential project impacts in the production areas within the seven selected states, and produced a series of recommendations. Plans were developed instead of frameworks given the clearly identified actions, beneficiaries and stakeholders within these production areas. As a general conclusion, the project will generate positive impacts and the risks are minimal, with no irreversible, large scale or cumulative impacts. Main risks are related to soil and water pollution, waste and agrochemical usage, and loss of agrobiodiversity. The Environmental Management Plan and the Pest Management Plan produced by ASERCA specify risks, actions and mitigation measures such as management, training, equipment, for fighting pests in grain storage, as well as related issues such as mycotoxins (aflatoxins) that affect human health. A series of measures are proposed in terms of the application and reduced use of chemicals and their thorough monitoring to address any potential negative environmental impacts. Good practices for post-harvest management will positively impact production and grain further commercialization.



The EA has developed a list of restricted activities and support, which will be incorporated into the Operational Manual. Some activities related to project interventions may result in indirect impacts which were identified and special actions recommended to be monitored, such as noise, vibrations, water, soil and air pollution. The EA also considers issues with organized crime in rural areas and in relation with agriculture.

Project design has benefited from experiences from the MasAgro program, and its work with small producers in Mexico. CIMMYT will lead the environmental and social monitoring during project implementation, ensuring compliance with Bank policies and bringing existent knowledge into the process.

The potential impact of the improvement of competitiveness on increasing the pressure on ecosystems was also considered. Specific actions were incorporated into the EMP to avoid impacts through a potential expansion of the agricultural frontier or by incorporating lands that are currently not producing and potentially in the process of regeneration.

The EA also assessed the potential loss of agrobiodiversity due to the increase of the number or percentage of producers that might focus more on commercial grains in lieu of traditional crops. The project will not support sub-project proposals that threaten traditional maize varieties. Moreover, the project aims to improve the commercialization of traditional varieties, hence incentivizing their production. This is expected to reduce the risk of loss of agrobiodiversity.

Both the EA and the EMP were developed incorporating the guidelines from the World Bank Group on Environment, Health and Safety, also borrowing from the expertise of CIMMYT in terms of good management practices and quality norms. Good practices, existent norms and regulations will be specified in the OM such as construction and rehabilitation norms, water and soil use regulations,



		<p>air pollution norms, etc.</p> <p>Consultations of the EA and the proposed EMP resulted in a very broad acceptance of the project activities; issues on production, storage, training, markets, traditional crops, communications were raised and incorporated into the EMP and project design. A permanent consultation process through the ASERCA regional offices and the joint work with CIMMYT will secure implementation and monitoring of potential risks identified in the process. A checklist to secure continuous follow-up and monitoring of considerations derived from the EMP is included in the Operational Manual. The “Guion Único para la Elaboración de Proyectos de Inversión” and the sub-project business plans to be presented for funding will be screened against compliance with environmental safeguards and especially designed templates for each accepted proposal will be used for monitoring and evaluation.</p>
Natural Habitats OP/BP 4.04	Yes	<p>This project will not support activities that lead to loss, conversion or degradation of natural habitats. The project focuses on areas currently under cultivation and with varying capacities of grain storage and value-chain integration. The EMP has identified all conservation areas in the seven states. All institutions involved have agreed that no project action would promote expansion that could directly or indirectly induce land use change and hence affect natural habitats. This safeguard is triggered to ensure that these commitments are honored during project implementation, considering that project activities will likely take place in highly biodiverse parts of the country. Key actions for project compliance with this safeguard were identified and incorporated into the EMP to avoid any unlikely action affecting natural habitats, such as identification of all key biodiversity areas and other natural areas of concern where no actions should be financed. This will be incorporated into the screening process of sub-projects.</p>
Forests OP/BP 4.36	Yes	<p>This project will not involve actions related to conversion or degradation of forest areas or other natural habitats associated with forests, including adjacent or downstream critical natural habitats.</p>



		<p>This OP is activated to safeguard native forests that co-exist with rural areas where agricultural production takes place and where collection centers will be improved, rehabilitated and/or, constructed. The EMP explains the clearance process to be followed to secure protection of native forests that coexist with agricultural lands where the project may intervene, and this will be included in the screening process for sub-project funding.</p>
Pest Management OP 4.09	Yes	<p>In general, the impact of this project is expected to be positive. The EA considers the use of agrochemicals as a risk, including other pest management practices, as they relate to grain storage. Based on the results of the EA, the EMP provides a thorough analysis and action plan in the terms of an IPMP to secure effective implementation of this policy. This IPMP, as an integral part of the EMP, provides an action plan for supporting the adoption of best environmental practices and standards, complying with environmental/legal requirements, evaluations or permits applicable, as related to grain storage. The IPMP incorporates best practices, technical assistance, and training aspects. A specific analysis and recommendations are given for insecticides used in storage practices, special recommendations are also provided regarding mycotoxins (aflatoxins). The experience of MasAgro and CIMMYT were of high importance for developing this Plan, and monitoring will be one of the crucial activities during project implementation.</p>
Physical Cultural Resources OP/BP 4.11	Yes	<p>The project is expected to finance the upgrade of existing grain storage centers as well as new construction of small facilities. The EA indicates that it is highly unlikely that any activity will have an impact on objects, sites, structures, natural features or landscapes with archeological, paleontological, historical or any other aspect of cultural significance. Based on this, it is considered low risk that project activities will have a potential impact on features of cultural significance. A prior screening to sub-project funding will include this policy and all bidding documents, contracts, and work-orders for civil works would follow standard environmental rules for contractors, which include chance find procedures for cultural property. The EA did not</p>



report landscapes potentially involving historical or cultural significance where storage facilities located; however, procedures and protocols to address chance findings of archeological and cultural resources during construction works, if any, will be included in the OM, with a recommendation that any chance finding be immediately communicated to the INAH.

This policy is triggered given that indigenous peoples are present in the project's area of influence, and could benefit from project activities. The project seeks to increase the participation of small semi-commercial agricultural producers. A Social Assessment was prepared by ASERCA to assess potential impacts on indigenous people and strengthen the project's performance under the modalities that are more likely to affect these indigenous peoples. The SA reports that the project scope, i.e. the proposed 7 states for intervention, comprise 59% of the indigenous population of Mexico, with Oaxaca, Chiapas and Veracruz accounting for the largest concentrations of indigenous people. Areas with high concentration of indigenous producers were identified to have limited to no access to grain storage infrastructure.

Indigenous Peoples OP/BP 4.10

Yes

While the project is not expected to have negative impacts on indigenous people, Indigenous Peoples Plan (IPP), based on the Social Assessment (SA), was developed and provides guidelines to improve outreach and consultation with indigenous beneficiaries, (e.g. language provisions, participatory approaches, design and construction techniques). The IPP seeks to provide enabling mechanisms for indigenous people to access the social and economic benefits of the project and receive culturally relevant benefits without generating inequality with other groups of social sectors of the population. It is widely held that indigenous groups are primary custodians of agrobiodiversity.

The SA elaborates on the information collected for indigenous people in the project area and identifies potential risks for these peoples. From the organizational, communal, productive and infrastructure point of view, several



recommendations were made. The IPP proposes three lines of actions: (a) reinforce participation and reduce cultural barriers, (b) communicate in a culturally appropriate way the opportunities of the project, and (c) develop a grievance handling mechanisms. The IPP also proposes a monitoring and evaluation mechanism to ensure that activities and recommendations are duly implemented.

A consultation process for the IPP was carried out in agricultural production areas with high concentration of indigenous people in the states of Oaxaca and Chiapas. Among the participants were producer beneficiaries of other government programs, indigenous groups leaders, municipal authorities, with the Consejo Consultivo from the CDI being the initial point of contact with indigenous leaders and invited to all consultations. Continuous consultations at the regional or local level are also planned given that the Consejo Consultivo will meet again in the second quarter of 2017.

Potential negative impacts identified include: 1) The support for grain storage near indigenous municipalities can increase further the inequality of these groups as: i) they rarely generate excess production; ii) criollo maize is traditionally not commercialized, but used for own consumption; iii) the use of improved seeds may have limited results without capacity building; iv) the risk of substituting criollo for other higher value varieties; v) they need maize for own consumption above all, and often they don't have enough of it; 2) To keep in mind: i) their social structures of organization based on an agrarian community or ejido; ii) given their geographic isolation, improving logistics will support the formalization of distribution and sale circuits, reducing the power of the "coyote" (middlemen).

Foreseen positive impacts identified include: Reduction of post-harvest losses and better market prices; the project may stimulate the interest by indigenous groups to formally organize themselves into producer associations to seek financing, to participate in markets and limit the power of middlemen, as well as to access "niche" markets for





		<p>their “specialty” maize production; widely benefit from capacity building related to production, storage and access to finance and markets, as well as market information.</p> <p>The SA provides recommendations beyond IPs, considering other vulnerable groups such as women, youth, and the elderly. The project will collaborate with the program MasAgro and use many of the variables that MasAgro has been collecting, including: gender inclusion, cultural relevance, participation, technologies to improve maize production, monitoring and farmer empowerment. To address gender issues, specific consultation and participation mechanisms will be implemented to ensure women are aware of the project, and contribute with their input in the design. This is integrated into the result framework of the project.</p>
Involuntary Resettlement OP/BP 4.12	No	<p>All of the sub-projects to be financed under this operation will be carried out on private land, owned or leased by the ultimate beneficiaries. Even if the project would finance rehabilitation/construction of new storage infrastructure (which farmers organizations can operate), there will not be any land acquisition/resettlement, and this will be clearly specified in the restrictive list of funding activities in the OM.</p>
Safety of Dams OP/BP 4.37	No	<p>No dams will be constructed or rehabilitated in this project. Project interventions will not rely on the performance of existing dams as smallholder agriculture is generally rain fed. This safeguard is therefore not triggered.</p>
Projects on International Waterways OP/BP 7.50	No	<p>There are no actions in international waterways. This safeguard is therefore not triggered.</p>
Projects in Disputed Areas OP/BP 7.60	No	<p>There are no areas in dispute in the territory proposed for project interventions. This safeguard is therefore not triggered.</p>



## KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The activities related to the physical rehabilitation of existing and/or construction of small storage infrastructure may have some environmental and social implications. Some risks in terms of soil and water management, waste management and the use of storage agrochemicals, as well as implications for indigenous people, were identified. Environmental impacts are limited given that the project will not support land use change activities and no native areas (including primary forests) will be degraded, traditional crops will not be replaced by high yielding or GMO varieties, and no actions will be taken in Conservation or Protected Areas or their buffer zones. The Environmental Assessment (EA) has not identified any large scale, significant or irreversible impact. However, several provisions have been made to secure that soil, water and air are not polluted, and agrochemicals are duly managed. Special recommendations are given to allow the participation of indigenous people in the project and reduce any potential social negative impacts.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

There are no long term impacts anticipated in the project areas; some indirect impacts due to rehabilitation and construction could be related to noise and vibrations, air, soil and water pollution, residues, and erosion among others. The increase in storage capacity and the need for a growing global market of grains, may pose a challenge to the project areas to produce more and this may have implications in terms of natural habitats and also induce an increase in the cultural gap with indigenous people. All these actions were carefully analyzed and described in the environmental and social analysis with specific recommendations aimed at reducing the occurrence of these risks.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The most important alternative to the expressed environmental and social situations is to bring existing experience in the country. This is achieved through the intended collaboration with CIMMYT (the International Maize and Wheat Improvement Center) and their role in the national agricultural program MasAgro, focusing on the use of better production and management practices of crops by small agricultural producers in Mexico, and in particular in the key project states. Their technical capacity, field presence, existing environmental and social dimensions incorporated in their program activities and especially their sustainable technologies (traditional seeds, diagnostic tools, conservation agriculture, and post-harvest technologies) gives the project a good alternative to reduce and altogether avoid risks.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

In recognition of its lack of capacity to address safeguard policy issues, and given the existing capacity and experience within CIMMYT, ASERCA is planning to hire CIMMYT to support them with the oversight of environmental and social safeguard policies and interactions with stakeholder and the productive sector. ASERCA acknowledges the importance of safeguards and that competitiveness also implies practices which are socially and environmentally appropriate and sustainable, and these dimensions and the interaction with CIMMYT will help increase the quality, the risk management and the institutional development with respect to safeguards compliance. The role of CIMMYT as a strategic partner to ASERCA for environmental and social performance is formally defined in the Operational Manual of the project and mentioned in the Legal Agreement.



5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Main stakeholders in this project are small and medium semi-commercial or commercial producers who already store or are interested in storing their grains. Among them are indigenous people, living in areas related to gathering centers (centros de acopio). Consultations were designed to be broad and extensive, with specific recommendations noted and an action plan prepared based on producer inputs in two of the most representative regions of indigenous people who are also maize producers - Chiapas and Oaxaca. Consultations were held with members of communities selected by a methodology which combined existing and potential beneficiaries, production and access to gathering centers, and logistics (access). Civil society organizations, institutes, sub-national governments and producers' associations among other participated in the consultations. A national level encounter with broader members of the stakeholder group was carried out in Mexico City, hosted by the CDI (the National Commission for the Development of Indigenous Peoples). Most of the information gathered to prepare both the Environmental and the Social Assessments and derived plans, was derived from the MasAgro Program experience, which helped mainstream lessons learnt and best practices.

## B. Disclosure Requirements

### Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank	Date of submission to InfoShop	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
09-Jan-2017	02-Feb-2017	

### "In country" Disclosure

Mexico

20-Jan-2017

Comments

Link to disclosed document:

<http://www.gob.mx/asercas/documentos/sistema-nacional-de-almacenamiento-agroalimentario?state=published>

### Indigenous Peoples Development Plan/Framework

Date of receipt by the Bank	Date of submission to InfoShop
10-Jan-2017	20-Jan-2017

### "In country" Disclosure

Mexico

20-Jan-2017

Comments

Link to disclosed document:

<http://www.gob.mx/asercas/documentos/sistema-nacional-de-almacenamiento-agroalimentario?state=published>



### Pest Management Plan

Was the document disclosed prior to appraisal?

Yes

Date of receipt by the Bank

09-Jan-2017

Date of submission to InfoShop

20-Jan-2017

### "In country" Disclosure

Mexico

20-Jan-2017

Comments

Link to disclosed document:

<http://www.gob.mx/aserca/documentos/sistema-nacional-de-almacenamiento-agroalimentario?state=published>

**If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

In-country consultations were held in Chiapas and Oaxaca and at the national level in Mexico City. Safeguard documents' disclosure date at the local and national levels is January 20, 2017.

### C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

#### OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

#### OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?

No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?

Yes



#### **OP 4.09 - Pest Management**

Does the EA adequately address the pest management issues?

Yes

Is a separate PMP required?

Yes

If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?

Yes

#### **OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?

Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?

Yes

#### **OP/BP 4.10 - Indigenous Peoples**

Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?

Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?

Yes

If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?

Yes

#### **OP/BP 4.36 - Forests**

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?

No

Does the project design include satisfactory measures to overcome these constraints?

NA

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?

No

#### **The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank's Infoshop?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?



Yes

#### **All Safeguard Policies**

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes

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Country Director:	Jutta Ursula Kern	08-Feb-2017

**Note to Task Teams:** End of system generated content, document is editable from here.