

NATIONAL AGROLOGISTICS PROGRAM

4

2018 ROADMAP



MÉXICO

GOBIERNO DE LA REPÚBLICA

SAGARPA

SECRETARÍA DE AGRICULTURA,
GANADERÍA, DESARROLLO RURAL,
PESCA Y ALIMENTACIÓN

NATIONAL AGROLOGISTICS PROGRAM

2018 ROADMAP

National Agrologistics Program

Report 4

2018 Roadmap

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1 Introduction

The 2018 Roadmap details the Working Guidelines and proposed actions to make the National Agrologistics Program a reality in the short-term and mid-term. The sexennial calendar has established 2014– 2018 as the length of this first phase of the program.

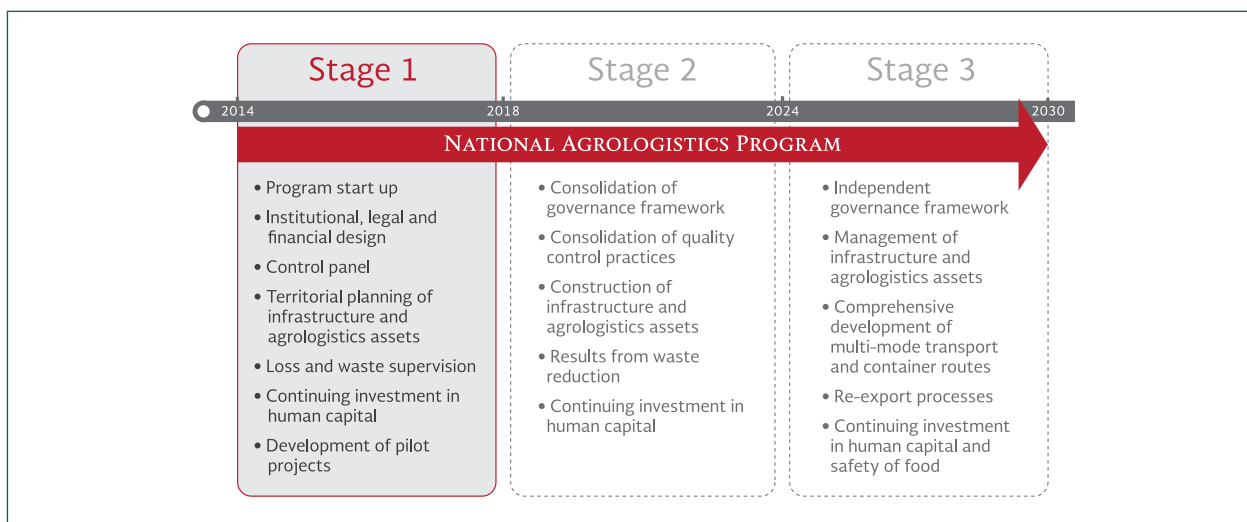
1.1 Context

The National Agrologistics Program establishes a Vision to be completed within 16 years and separated among 3 presidential terms (3 terms of 6 years). This means that the involvement of 3 administrations is needed and that each one should establish a planning, management and a policy evaluation cycle. A new phase of the program should be created with each cycle.

The 2014–2018 period is the startup phase. This phase deals with the objectives of information mapping, institutional alignment, policy planning and revision of the regulatory framework in order to facilitate its implementation. It also involves the launching of pilot projects that help to accelerate the learning curve of the process. The second phase gives more priority to the construction of infrastructure and adoption of new standards along the chain. The success of the Program in this phase depends on the alignment and consolidation between key players, judicial reform consolidation and investments lined up in the startup phase. In the third phase, after a decade, the leadership of the program will be transferred to the private sector, in such a way that the continuity of the policies can be guaranteed. This allows addressing projects that require high investment and coordination by the public and private actors, such as integral development of multimodal transport or the establishment of new global transport routes for containers of perishable goods.

A roadmap is an action plan that establishes the sequence of steps needed to reach an objective. It should specify measurable objectives, responsible agents, time and necessary resources.

Figure 1.1. Phases of the National Agrologistics Program



Experience proves that for a public policy program as ample and ambitious as this to be successful, the startup phase is of vital importance and requires effective planning and actions that can be executed and measured in the short term. The 2018 Roadmap should connect the Vision's long-term objective with the actions executed today.

Specifically, the Roadmap provides:

- An **action plan** that defines concrete actions in a predetermined amount of time
- A **critical route** or sequence of necessary steps until the objective is reached
- Some **measurable goals** that allow the constant evaluation of progress, correcting the course if it is necessary
- The **assignment of clear responsibilities** to those involved which facilitates accountability
- A **resource assignment method** coherent with time and scope

1.2 Methodology

The 2018 Roadmap complements two previous reports, the Diagnosis and the Strategy Report, which analyze the current situation and propose the Working Guidelines for future agrologistic development in Mexico. The starting point of these recommendations is the declaration of the Program's Vision: ***To become a world leader in export of agri-food products by the year 2030.***

This declaration of vision, that has been detailed extensively in section 2 of the Strategy Report, was developed and adopted by a leadership group comprised of the directors of the main public and private entities that form a part of Mexico's agri-food value chain.

The objective of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), as a mobilizer of this group, has been to involve interested parties from the start of the Program to facilitate the implementation and the continuity of policies. During the Vision Workshop the group's representatives worked in dialog tables, each one reflecting on the collective vision and focusing on a success factor validated by national and international experts. With the contribution of each one of the dialog tables, the Working Guidelines for the short-term and mid-term goals were defined. Subsequently, this proposal was evaluated by the Directorate General for Logistics and Food and validated by 7 key players¹.

The methodology of the Roadmap consists of:

1. Identify measurable objectives, which are realistic in the time frame by Working Guideline and Action. Result: Measurable Objectives/ Indicators
2. Identify components of each Action based on the question WHAT, WHO, WHERE, HOW? Result: Components and planning per Action
3. Develop the programming of the activities of the Working Guideline answering the question WHEN? Result: Programming document
4. Identify the costs to carry out the Actions of the Working Lines answering the question HOW MUCH?, and considering the proposed programming. Result: Budget

The results are presented in a Technical Sheet² for each Action. Such Technical Sheet includes the information fields detailed in *Table 1.2*.

¹ The consulted players in the validation process of the Strategic Report were: SAGARPA- Undersecretary for Food and Competitiveness; SAGARPA- General Coordination of Advisors; SENASICA- Directorate General of Phytosanitary Inspection; SE Directorate General of Standards; SCT- Undersecretary of Transport; SEDATU- Undersecretary of Land-Use Regulation; Inter-American Development Bank; National Agricultural Council; Office of the President- Technical Secretary of the Cabinet.

² The 15 technical forms of the Program are attached in section 3.3 of this report.

Table 1.2. Fields of the technical sheet for the Program's Actions.

CONTEXT	Describes the context in which the Action is proposed, its alignment with the Working Guideline, and its need.
ACTION OBJECTIVES	Describes the Action's specific objective. E.g. "Create an extension network", or "supervise the progress in the reduction of postharvest losses and waste".
RESULTS	Describes the Action's expected results. E.g. "Increase the objective population's abilities" or "reduce the postharvest losses and waste by 10%".
DELIVERABLES	Describes the Action's deliverables. E.g. "Design and execution of a B2B innovation forum in the first year" or "upcoming course catalog".
WORK AGENDA	Describes the temporary sequence of priorities that should be addressed for the implementation of the Action, indicating the period in which each point of the Action agenda will be implemented. A quarterly definition is provided for years 2015 and 2016.
MEMBERS	Describes the relation of those involved and their corresponding activities. LEADER: Identifies the entity or entities that are, due to their orders or relation with the scope of the Action, in a better position to push forward the agenda in the short-term. PARTICIPANTS: identify the entity or entities that should contribute or form part of the design or implementation of the Action. BENEFICIARIES: Identify groups that receive a positive impact from the Action.
DATES	Indicates the quarters in which the activities of DESIGN, IMPLEMENTATION and EVALUATION of the Action are started.
RESPONSIBLE UNIT	Identifies the entity responsible for the execution of the Action and its budget.
SCOPE	Indicates the Action administrative scope: INTERNATIONAL, FEDERAL, REGIONAL, STATE, and MUNICIPAL, such as the location and main administrative office of the Action.
INDICATIVE BUDGET	Describes the general concepts of the budget calculation and indicates amounts for the four assignment periods between 2015 and 2018, as well as the total amount.

2 Measurable objectives to achieve the Vision

To become a world leader in export of agri-food products by the year 2030

In realizing this Vision we will abide by the following values and principles:

- Promote high quality and high value agri-food products at a competitive price, for both the domestic and external consumers.
- Minimize food losses and waste to help enhance food security, economic productivity and environmental sustainability.
- Engage stakeholders in the agri-food chains in decision making to promote equity and justice, making globalization work for all Mexicans.

As already indicated at the beginning of this report, the starting point of this 2018 Roadmap is: the Vision established in May of 2014 by the Leadership Group, the 5 Working Guidelines (WG) that were extracted from its principles and the 15 short-term and near-future Actions.

To construct a solid Roadmap it is necessary to translate the Vision and its principles in concrete actions with measurable objectives that can be monitored through the time. In this way, as general objectives, it is expected that in 2030 Mexico finds itself among the 10 top countries with the greater value of agri-food exports, as well as within the top 20 countries in the Logistic Performance Index (LPI) , measured by the World Bank.

Table 2.1. Measurable objectives to achieve the Vision

Measurable objectives to achieve the Vision				
Vision	Current Situation	2018	2024	2030
<i>"To become a world leader in export of agri-food products by the year 2030"</i>	20 th place in export value	18 th place in export value	15 th place in export value	Among the top 10 exporters in the world
	50 th position in the LPI index	40 th position in the LPI index	30 th position in the LPI index	Among the top 20 in the LPI index

Table 2.2. The 15 Actions of the National Agrologistics Program

WG1	An effective governance framework to discuss policies, development of technical solutions, and progress evaluations
	<ul style="list-style-type: none"> 1A. Establish the National Agrologistics Council 1B. Establish a Technical Agrologistics Secretary 1C. Create a Control Panel to inform and evaluate
WG2	Standardization of the chain based on quality
	<ul style="list-style-type: none"> 2A. Create a pre-approval system at points of origin or consolidation of the chain based on risk management 2B. Standardize the quality of packaging and traceability systems 2C. Develop a standardization strategy
WG3	Planning and construction of Agrologistics and multimodal assets in strategic locations
	<ul style="list-style-type: none"> 3A. Prepare a comprehensive master plan, including project prioritization 3B. Develop the building design and development and management models for Agrologistics and multimodal assets 3C. Develop and implement framework agreements with state governments
WG4	Promote a business model based on demand, beneficial and open to all parties
	<ul style="list-style-type: none"> 4A. Multiply investment resources through special purpose entities and the Agrologistics Fund 4B. Encourage business models and associations of small producers 4C. Establish auditable and transparent processes
WG5	Building of human capital and efficient tools for the dissemination and follow-up of information
	<ul style="list-style-type: none"> 5A. Establish a modular training program based on Extensionism Networks 5B. Establish an inter-sectorial commission for supervising postharvest losses and waste 5C. Create an Agrologistics Network of Excellence for postgraduate studies and innovation

2.1 Value of agri-food exports

2.1.1 Current situation and projections

According to 2013 data, Mexico is in 20th place among countries with greater export value in agri-food products (See Table 2.3.) with exports reaching \$24.5 billion USD. The growth rate of such exports has been 8.5% annually starting in 2000³.

³ Based on the formula: Future Export Value = 2000 Export Value * (1 + Growth Rate)ⁿ

Despite this growth, Mexico went from 16th place in 2000 to 17th in 2005 and 20th in 2013. This was due to a greater export growth of other countries, such as India, Indonesia, Malaysia, Poland and New Zealand.

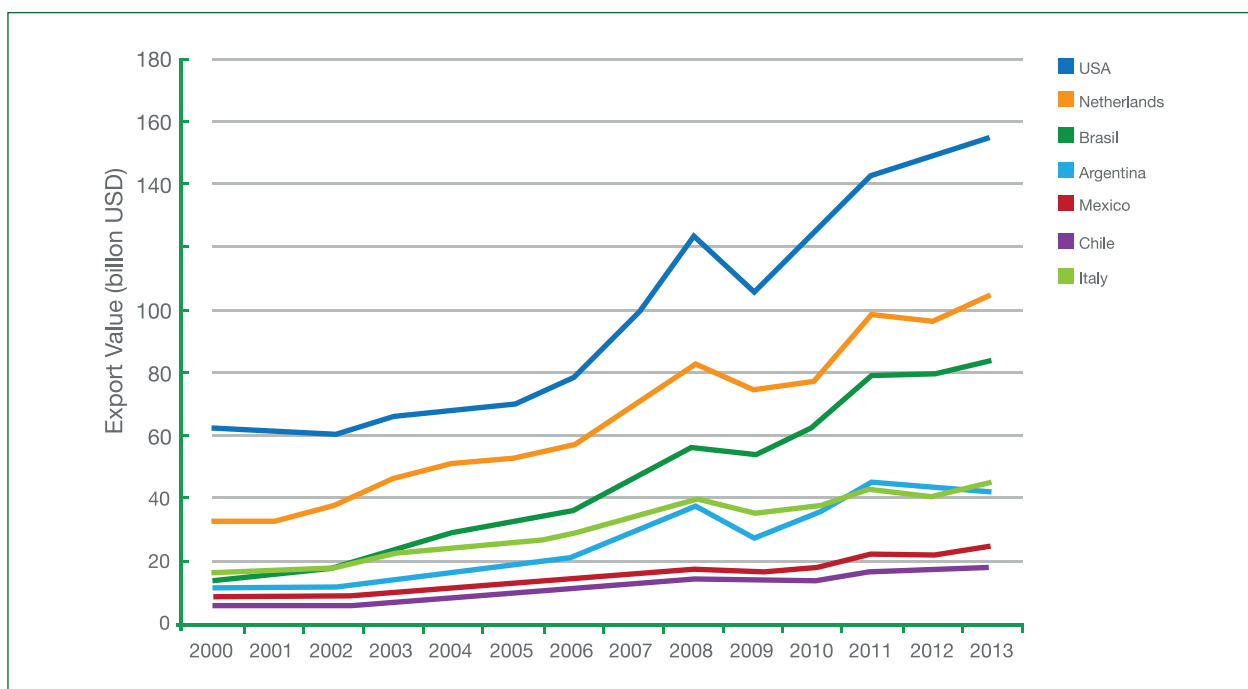
If Mexico today was in the 10th position among the countries with the highest agri-food export value, it should be having a flow close to \$44.6 billion USD, which is what Italy currently exports. This means that starting in the year 2000 the annual rate would have needed to grow by 13.6%, which is a lower rate of growth than

Table 2.3. Value of 2000-2013 agri-food exports (in billions USD).

	Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Annual Increase Rate (%)
1	USA	62.0	61.4	60.1	65.7	67.3	69.7	77.9	97.0	122.2	105.3	122.3	142.7	150.0	155.0	7.3%
2	The Netherlands	32.3	32.6	36.6	45.4	51.0	52.6	58.0	70.9	82.6	74.4	77.5	98.2	95.3	103.5	9.4%
3	Germany	25.3	28.6	31.1	35.4	41.4	48.7	54.4	63.6	76.7	68.5	71.6	86.6	83.3	90.2	10.3%
4	Brazil	13.7	16.9	17.7	22.0	28.4	32.1	36.2	44.3	56.3	53.3	62.5	79.2	79.1	84.0	15.0%
5	France	34.3	32.5	36.0	43.6	47.8	48.7	52.5	61.6	71.4	59.8	63.8	76.7	72.7	77.5	6.5%
6	China	15.4	16.0	17.9	21.2	23.2	27.4	31.0	36.6	40.3	39.1	48.5	59.6	62.1	66.3	11.9%
7	Canada	27.5	28.4	27.6	28.4	34.2	35.3	37.8	41.3	46.7	38.6	44.5	51.8	55.3	58.2	5.9%
8	Spain	16.1	17.7	19.9	24.6	27.6	28.4	30.3	35.7	41.3	37.1	38.5	44.2	45.6	49.5	9.0%
9	Belgium	17.9	18.6	19.6	23.7	27.4	28.9	30.5	36.5	42.9	37.8	38.3	44.6	43.5	49.4	8.1%
10	Italy	15.9	16.6	18.3	21.8	24.5	25.8	28.2	33.5	38.9	34.6	37.1	42.3	41.3	44.6	8.3%
11	Argentina	11.6	11.9	11.8	14.8	16.7	18.8	21.0	28.4	37.1	27.8	34.1	44.5	42.7	41.6	10.3%
12	India	5.8	6.2	6.8	7.0	8.4	9.7	11.1	14.2	19.0	14.8	19.2	29.8	37.6	41.1	16.2%
13	Australia	13.6	13.8	14.6	14.0	19.4	18.5	19.5	19.4	23.5	21.4	23.8	31.5	32.7	33.5	7.2%
14	Indonesia	6.0	5.5	7.1	7.5	9.4	10.5	12.4	17.5	24.9	20.7	26.6	34.0	34.8	33.1	14.0%
15	United Kingdom	16.1	14.7	16.0	19.1	21.0	20.9	22.2	25.9	27.5	24.0	26.7	31.8	30.5	31.7	5.3%
16	Thailand	10.2	10.3	10.3	11.7	13.0	13.3	15.3	18.3	24.0	22.9	26.0	32.8	32.1	31.0	8.9%
17	Malaysia	7.2	6.6	8.4	10.4	11.7	11.6	13.1	18.2	25.1	19.3	25.5	33.7	30.4	27.1	10.7%
18	Poland	2.9	3.2	3.5	4.8	6.9	9.2	11.0	14.2	17.5	16.1	18.2	21.6	22.9	27.0	18.8%
19	New Zealand	6.9	7.6	7.9	9.1	11.3	12.2	12.4	15.1	17.0	14.7	18.6	22.9	23.0	25.7	10.6%
20	Mexico	8.5	8.3	8.4	9.4	10.6	11.9	14.0	14.9	16.4	16.1	18.1	22.0	21.9	24.5	8.5%

Source: Personal Compilation based on data from UN Comtrade (consulted on 08-04-2014) and summarized according to the Standard International Trade Classification of the UN Statistics Division. (SITC Standard International Trade Classification) The following products are grouped (according to the Dutch list of agricultural export products) Code SITC Rev. 3 Description of Code: 00 Live Animals. 01 Meat and prepared meats. 02 Dairy Products and birds' eggs. 03 Fish (not including marine animals), crustaceans, mollusks and aquatic invertebrates y its products. 04 Grains and grain products. 05 Legumes (vegetables) and fruits. 06 Sugars, sugar products, honey. 07 Coffee, tea, cocoa, spices, and its products. 08 Animal feed (except unground grains). 09 Products and various prepared foods. 11 Drinks. 12 Tobacco and tobacco products. 21 Leathers, skins and fine skins, untanned. 22 Seeds and oil fruits. 24 Cork and wood. 272 Crude fertilizers, except those from chapter 56. 29 Animal Products and crude vegetables, n. e. p. 41 Oils and fats of animal origins. 42 Oils and fixed fats of vegetable origin, raw, refined or split. 43 Oils and fats of animal or vegetable origins, Processed; Animal or Vegetable wax; non-edible animal or vegetable oil/ fat mixes and products n.e.p.

Figure 2.4. Panorama of the development of agri-food export value from 2000 to 2013 of some countries.



Source: UN Comtrade

India and Brazil, 16.2% and 15.0% respectively, for the same period. However, to get to the 10th position in 2030 Mexico will have to generate at least an additional \$40 billion USD of exports, above the normal expected growth. Extending this toward the future, would mean a total export value for Mexico in the year 2030 of around \$80-100 billion USD. To reach this objective would require an annual growth rate of around 10%.

This is a notable challenge but previous examples of countries that have achieved an annual growth rate significantly higher than 10% exist. Besides those already mentioned, there is the case of Brazil, that achieved an average growth of 15% of the value of their exports between 2000 and 2013, which helped them climb from the 11th to 4th position in the ranking of countries who export the most.

The estimate of future exports depends, besides the actions that we can control such as strategies to facilitate trade, such as those proposed in this document, of those we cannot control such as fluctuation of price, climate change, new consumer trends and geopolitical conflicts⁴. It is important to note that world exportation of agricultural products has skyrocketed in the last few decades due to development of supply chains and refrigerated transport. However, these tendencies could change, since the markets can turn towards internal consumption, tending

to the demands of its own population. Also, it is expected that the growth rates of exporting European countries reduce in the following decade due to lower demographic growth and the current economic crisis. In fact, the most important growth in the next decade is expected to take place in the countries of Africa, Asia, Latin America and the Caribbean. In particular Mexico's internal market is expected to grow significantly, which could result in fewer exports.

Beside this, it is possible to imagine Mexico as an international logistics platform that re-exports agri-food products, similar to e.g. the Netherlands and Belgium, which would allow Mexico to benefit from its geographic location and turn into a leading supplier for North American and South America, such as the Far East (China, Japan, South Korea).

⁴ For example, the sanctions on Russia derived from the August 2014 crisis in Ukraine, has resulted in the cessation of imports of horticulture goods that come from southern Europe.

2.1.2 Benefits of increasing market participation

Another way to reach the objectives of the program is through an increase of the participation in the markets of the importing countries. Given that the export of fruit and vegetables to the United States is the most important export, this case has been selected for analysis. Two other cases are also reviewed: the increase in avocado exports to Europe and the increase in pork meat exports to China.

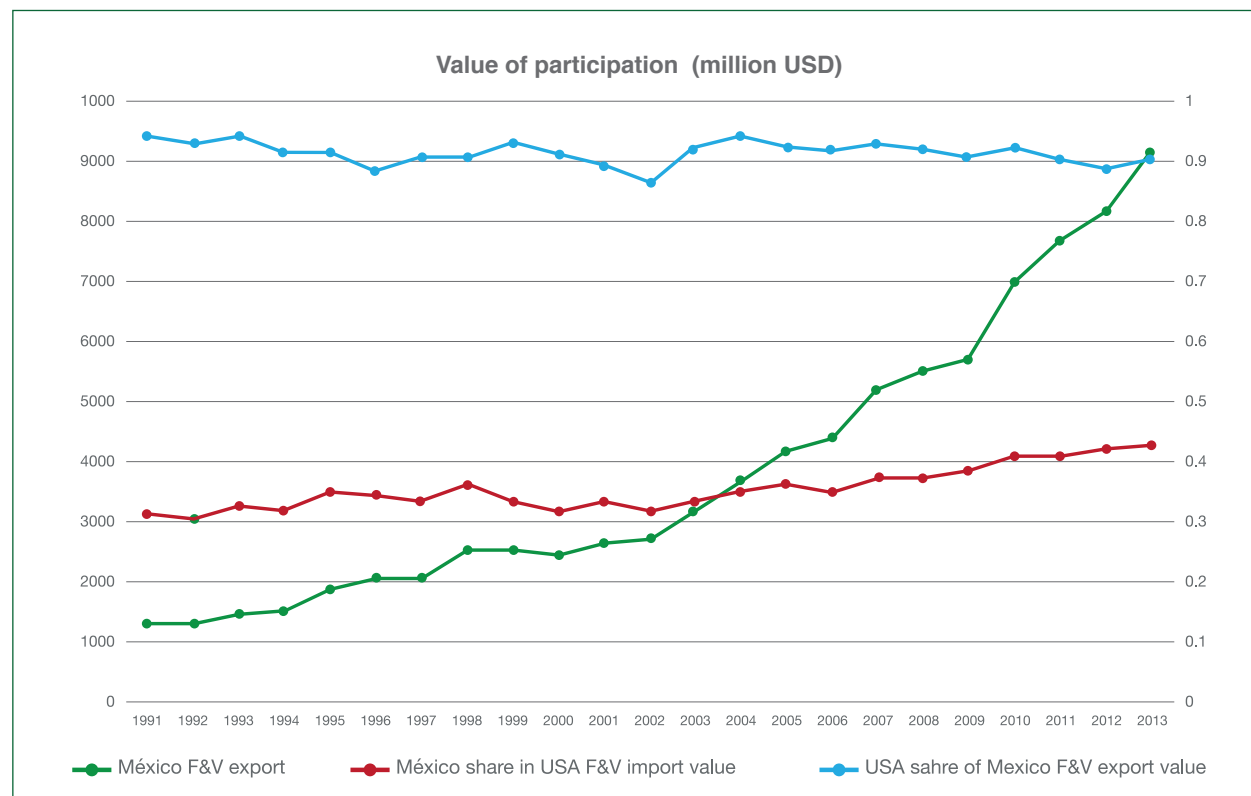
Fruit and Vegetable Exports to the United States

The fruit and vegetable sector is the most dynamic sector in Mexico in terms of agri-food exports. Mexican exports in general, but particularly for these products, are extremely dependent on the United States' market. This dependency is made even greater after the signing of the Free Trade Agreement, which gave Mexico a competitive advantage. *Figure 2.5.* shows the relationship between Mexican exports and US imports of fresh fruits and vegetables.

From 1991 to 2003 90% or more of all Mexican fruit and vegetable export is to the US market. The value increased itself from \$1 billion USD in 1991 to \$9 billion USD in 2013, which is owed mainly to a significant increase in world food prices starting in 2001. Mexico's share in the import market of fresh fruit and vegetables to the USA is slowly growing and is now just over 40%.

Based on *Figure 2.5.* the outlook for the export of fresh Mexican fruit and vegetables strongly depends on development in this sector in the United States. This outlook is explained in more detail in *Table 2.6.*

Figure 2.5. The trade of fruit and vegetables between Mexico and the United States.



Source: UN Comtrade

Table 2.6. Outlook of the balance of fruits and vegetables in the United States from 2011 to 2022.

Fruits and Dry Fruits in USA (Volume in Million Pounds)				Vegetables in USA (Volume in Million Pounds)			
		2011	2022			2011	2022
Supply	Production	71,020	70,600	Supply	Production	117,006	131,239
	Imports	39,871	54,380		Imports	22,776	33,122
	Total	110,891	124,980		Total	139,782	164,361
Use	Exports	15,737	19,317	Use	Exports	19,364	27,337
	Domestic use	95,153	105,663		Domestic use	120,418	137,024
	Total	110,890	124,980		Total	139,782	164,361

Source: Agricultural Projections for 2022 USDA, Inter-agency Agricultural Projections Committee (2013), p80;
<http://www.thefarmsite.com/reports/contents/AgriProjectionsFeb2013.pdf>

The previous table shows an increase in the deficit of fruits and vegetables in the United States. It is projected that the import of fruits and vegetables will grow from 39,871 million pounds (18 million tons) in 2011 to 54,380 million pounds (24 million tons) in 2022. For vegetables, the change is from a starting point in 2011 with 22,776 million pounds to 33,122 million pounds in 2022. In which the estimated Average Annual Growth Rate (AAGR) for the volume of fruit and vegetable imports is from 2.9% to 3.5%, respectively.

The best way to reach the objectives consists of increasing exports to the US.

Growth of imports into the USA in value

Fresh Vegetables

The total value of fresh vegetable exports to the US was \$4,591 million USD in 2013. The growth rate has been 9.5% per year during the 2000-2013 period. The following table shows that the Mexican market share for fresh vegetables in the US on average was 66% in the last decade and with a small tendency to grow. Based on this data and the United States Department of Agriculture (USDA) projections we could estimate an increase of an additional \$3,084 million USD in exports until reaching \$7,675 million USD total. If the market share reaches 75% then the value of exports will increase with \$3,632 million USD reaching up to \$8,223 million USD.

Fresh Fruit

The total value of Mexican fresh fruit exports to the US was \$3,254 million USD in 2013. The growth rate was 13.8% per year during the 2000-2013 period. Table 2.8. shows that Mexico's market share in the fresh fruit market of the US has had an average growth of 31% during the last decade and has been growing. Based on USDA projections we can estimate that with a market share estimated around 40%, the market potential of Mexican products by 2030 will increase by \$2,607 million USD and reach up to \$5,861 million USD. If the market share increases up to 50% that would represent an increase of \$4,072 million USD reaching up to \$7,326 million USD.

Table 2.7. Value of Mexican vegetable and fruit exports in the US market in millions USD

Fresh Vegetables	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Import Value from US	2,148	2,443	2,546	2,981	3,346	3,564	3,972	4,270	4,496	4,328	5,364	5,900	5,904	6,782
Mexican Exportations Value to US	1,408	1,614	1,618	1,935	2,185	2,319	2,577	2,807	2,949	2,844	3,620	4,058	4,056	4,591
Mexico's Market Share	66%	66%	64%	65%	65%	65%	65%	66%	66%	66%	67%	69%	69%	68%

Source: <http://www.ers.usda.gov/data-products/us-food-imports.aspx>

Table 2.8. Value of Mexican fresh fruit exports in the US market in millions USD

Fresh Fruits	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Import Value from US	3,041	3,165	3,401	3,563	3,821	4,397	4,848	5,525	5,756	6,234	7,021	7,403	7,791	8,707
Mexican Exportations Value to US	604	663	664	755	903	1,214	1,156	1,650	1,725	1,989	2,382	2,491	2,860	3,254
Mexico's Market Share	20%	21%	20%	21%	24%	28%	24%	30%	30%	32%	34%	34%	37%	37%

Source: <http://www.ers.usda.gov/data-products/us-food-imports.aspx>

Conclusions

The export of fresh fruit and vegetables in the US market offers great opportunities, due to the fact that growth in demand of these products is expected. The Mexican market's share in fresh vegetables is already significant, so it is difficult to obtain high growth. Instead, for fruit the market share can be modified more easily, creating opportunities for greater growth of exports. In *Table 2.9*, the added projections for exports to the US market are shown.

In summary, the demand of fresh fruit and vegetables in the United States is growing and Mexico is poised to cover this demand. If the market share should increase for fresh vegetables from 66% to 75% and for fresh fruits from 31% to 40% from now to year 2030, the result will be an export value growth for fresh vegetables of \$3.6 billion USD and \$4.1 billion USD for fresh fruit (see *Table 2.9*). Despite this figures, when we compare this contribution with the proposed export goal we observe that the goals are ambitious and that it requires a coordinated effort to achieve them.

Table 2.9. Added projections for the exports of Mexican fruit and vegetables to the US market in million USD

Product and Participation	2013	2018	2024	2030
Fresh Vegetables (66%)	4,591			
70%		5,411	6,505	7,675
75%		5,798	6,969	8,223
Fresh Fruit (31%)	3,254			
40%		3,919	4,911	5,861
50%		4,899	6,139	7,326

2.1.3 Commentaries on the opening of new markets

One advantage of the efforts to facilitate trade is the opening of new markets and as a consequence there is a multiplying effect on exports. This is the case of Mexican avocados (see *Table 2.10.*). In this table we see that starting at the lifting of restrictions on exports from the state of Michoacán, the exports increase significantly, going from \$60 million USD in 2004 to \$992 million USD in 2013. This constitutes the creation of a new \$932 million USD market in less than a decade and with an increase of 30% in the last year.

Red fruits represent a similar case (see *Table 2.10.*), it increased its market value from \$52 million USD to \$419 million USD in the same period. Maybe not as dramatic as in the case of avocados, but also, generating a new market of great importance.

Table 2.10. Mexican Fruit exports to US in million USD

Product	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Increase % 2012-2013
Avocado	39	32	60	227	180	444	497	374	490	770	762	992	30.10%
Berries	28	41	52	58	94	142	161	177	267	302	380	419	10.10%
Grape	203	226	207	301	153	262	225	286	464	284	362	332	-8.20%
Strawberry	56	55	70	91	129	131	117	152	218	235	349	318	-8.80%
Melon	48	62	92	98	122	140	176	204	234	191	217	270	24.70%
Mango	83	93	88	107	138	123	129	141	180	188	214	250	16.80%

Source: US ITC Dataweb (2014)

Table 2.11. World import of US fruits in million USD

Product	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Increase % 2012-2013
Banana	0	0	0	0	0	0	0	0	0	0	1.940	2.016	3.90%
Grapes	680	677	732	945	921	961	975		1282	1034	1044	1189	13.80%
Avocado	135	157	157	338	246	554	580	711	575	913	860	1089	26.70%
Walnut	353	384	549	549	508	561	634	583	692	881	804	911	13.40%
Pineapple	188	224	233	266	440	430	458	461	505	474	513	540	5.20%
Berries	70	88	132	148	197	227	291	299	393	438	504	536	6.40%
Mango	163	176	169	195	233	224	260	263	304	353	380	449	18.30%
Other berries	38	51	67	77	110	162	179	188	274	312	389	432	10.80%
Prepared fruit	85	114	131	167	212	259	253	186	212	316	398	400	0.40%
Strawberry	120	177	287	271	281	209	250	284	302	352	370	336	-9.30%
Melon	59	57	72	92	130	132	118	153	219	236	350	319	-8.90%

Source: US ITC Dataweb (2014)

Another example of opportunity to open markets is the growing demand of pork meat in China. Based on data from the USDA for import to China for pork meat for the year 2023 and extrapolating towards 2030 (see *Table 2.12*)⁵, resulting in an annual rate of 4.83%. Extending this projection to 2030, it is estimated that 1,680,000 tons, at a price of \$2,190 USD per ton (2013 average), would mean a market of \$3,679 million USD of Chinese pork meat imports for 2030.

Table 2.12. Imports of pork meat by China.

Year	Volume (Thousand tons)	Rate	Value (million USD)	Market Share	
				1%	5%
2012	730		1599		
2013	750		1643		
2014	775	1.03	1697	17	85
2015	822	1.06	1800	18	90
2016	858	1.04	1879	19	94
2017	899	1.05	1969	20	98
2018	954	1.06	2089	21	104
2019	1004	1.05	2199	22	110
2020	1056	1.05	2313	23	116
2021	1101	1.04	2411	24	121
2022	1142	1.04	2501	25	125
2023	1194	1.05	2615	26	131
2024	1254	1.05	2746	27	137
2025	1316		2882	29	144
2026	1382		3027	30	151
2027	1451		3178	32	159
2028	1524		3338	33	167
2029	1600		3504	35	175
2030	1680		3679	37	184
Note:	Price 2,190 USD/Ton				

Source: Self Extrapolated 2024-2030 based on "Pork supply and use, selected countries and global totals" <http://www.ers.usda.gov/data-products/international-baseline-data.aspx#45167> (2014).

⁵ The average estimated growth for the volume of tons imported is used in the 2018-2023 period.
 $\text{Volume in 2030} = \text{Base 2013} \times (1 + \text{rate})^{(\text{years 2013 and 2018})}$.

Assuming that Mexican producers can increase their market share from 1% - 5% of the Chinese market, Mexican exports could then increase between \$37 and \$184 million USD by 2030, depending on the final share (see *Table 2.12*). This is a similar market to that of Chile, which considers this a feasible goal as long as an adequate strategy is applied, which positions Mexican products in a market that is expected to have a high demand for such products.

As it can be seen, one of the advantages of opening new markets is the possibility to incorporate new products in an existing market. In the case of Mexico, it has ample opportunities to increase significantly its position in other fruit products that currently are not that relevant, such as pineapple, mango (mango, magóstenos, guava), bananas and walnuts, in which the market share can still grow.

Also, given the dynamic nature of the market and consumer preferences, new markets in countries with high purchasing power can be suggested, such as the United States. For this reason it is very important to be attentive to not only explore and exploit emerging market niches, but also seek to create them, in which high dedication of producers and entrepreneurs to its major export market is necessary.

Another benefit of opening new markets is to diversify the sales of the same product. In the case of the avocado, there is currently a demand in Europe of \$557 million USD (see *Table 2.13*.), of which Mexico only has a market share of 4% (\$20 million USD). It can be deduced that with adequate advertising and logistics, it should be feasible to increase Mexico's market share to 10% or 20%, which would increase sales between \$55 and \$111 million USD. Although one of the limiting factors can be production, if the European market accepts the exports of other states in the Republic, not only from Michoacán, production could be increased significantly. This would open the possibility of a market with a huge number of consumers, and whose consumption could grow to have a better product at a better price and all year round.

Besides adequate development of an untapped market for the product mentioned, it is possible to generate synergy with other products for an eventual increase of cash flow, and implementation of adequate logistics to manage it (for example, maritime routes), facilitating the incorporation of new products in this same market.

Table 2.13. Import market for avocados in the European Union (2013).

Market shares in EU-28 imports of avocados in 2013			
Country	Value		Volume
	Thousands of \$	%	Ton
Peru	195.0	35%	86,258
South Africa	104.7	19%	44,072
Chile	104.6	19%	50,679
Israel	78.0	14%	37,089
Kenya	29.8	5%	13,313
Mexico	20.1	4%	8,759
Brazil	9.2	2%	3,928
Dominican Republic	4.7	1%	2,363
Tanzania	2.3	0%	968
Morocco	2.3	0%	1,397
Other	6.2	1%	2,788
World	556.9	100%	251,614

2.1.4 Estimation of the composition of increases to exports in agreement with the areas of observed opportunity

The export value in 2013 was \$24 billion USD. Our objective is to grow to \$80- \$100 billion USD⁶ by 2030.

What are the moderate projections for this growth?

The projections based on the historic growth (2000-2013) will drive the export value to around \$45-\$70 billion USD in 2030. This range is ample due to various known and unknown factors that influence the export value.

The National Agrologistics Program should add an additional \$10-\$30 billion USD to export value. Based on the calculations of some cases described previously, the additional growth in export values can be achieved in the following way:

- \$5 - \$7 billion USD; Growing the market share of fresh fruits and vegetables to the United States.
- \$5 - \$7 billion USD; growing the market share of goods exported to the United States, assuming that the facilitation of trade of fresh products also favors similar products
- \$1 - \$5 billion USD; growing the market share of meat exports to Asia: Japan, South Korea, China⁷
- \$1 - \$5 billion USD; growing the market share of fresh fruits and vegetables to the European Union
- \$1 - \$5 billion USD; growing the market share of the whole agri-food portfolio in general to Latin America and Africa

2.1.5 Conclusions

Realizing the potential of Mexico to become a world leader in agri-food product exports in the year 2030, requires to maximize export opportunities to the United States and increasing its current market share in fresh fruits and vegetables.

1. While exports of Mexico increased at a rate of 8.5% annually, the position in the list of exporting countries has dropped four places since 2000. In 2013, the value of Mexican agri-food product exports was \$24.5 billion USD, which places Mexico in the 20th position in the world. In the year 2000 Mexico was in the 16th position and since that year Mexican export value has had an annual growth of 8.5%.

2. Not doing anything means that Mexico would descend further in the classification. The export value of other countries, especially those in higher positions in the classification, have grown quicker than Mexico's. If Mexico wants to put itself at a better position in this classification, it needs to make an additional effort to push new strategies that support the sectors objectives.

3. Achieving the planned objective of this Program requires an annual growth above 10%. The objective of the National Agrologistics Program is to achieve an additional increase in agri-food exports in 2030 up to at least \$80-100 billion USD.

4. The internal consumer market competes with export markets. The national market is growing, especially in the consumption of protein goods. One of the priorities of the country is to fulfill the growth necessities of the domestic market, which is relatively easier than exporting. It is expected that if the internal market is attractive, there will be less interest in exporting. This could affect the goals, but not the necessity to increase competition, since Mexico operates in a global market.

5. The United States is the main export market for Mexico. The products that are more dynamic in exports are fruits and vegetables. Mexico's market share in US imports is 31% for fruits and 66% for fresh vegetables.

⁶ Without taking into account inflation.

⁷ Market study and marketing system for meat export to the USA, Europe and Asia of the FIT plants of the UGR-BC 2009. Genesis Agrologistic

To reach the Program's objectives, these shares should be increased: from 66% to 75% for vegetables, resulting in an additional \$4.6 billion USD; and from 31% to 40% for fruits, resulting in an additional \$3.3 billion USD. Lastly, the export of processed goods should not be forgotten (of vegetable and animal origin) with a high added value to the US. These could contribute significantly to the total value of exports.

6. The opening of new markets is important to diversify exports; however, its contribution to growth in absolute terms in comparison with the US market is limited. Ample opportunities exist for the creation of new markets in Europe and also Asia, in fruits and vegetables and in meat products. For example, Mexico has the opportunity to become a global player in the trade of processed meats, above all in Asian markets. However, the contribution of new markets is limited compared to the main market of North America.

7. **None of this will be possible without the concentrated effort to facilitate trade.** For this growth to happen it is necessary to improve the competitive position of Mexico in these markets, particularly in the US and to make significant changes to institutional coordination, improvements to transport infrastructure and logistics assets, and an adequate regulatory framework to facilitate trade.

2.2 Logistics Performance Index (LPI)

The second quantifiable objective that positions us in line with our Vision, is considerably improving Mexico's position in the Logistics Performance Index (LPI) of the World Bank.

The LPI uses six key dimensions to reference the performance of countries in logistic matters, as well as in a LPI composite index⁸. The table below allows a comparison with other countries (with the option to show the country with the highest performance) and with the region or group of countries of comparable income, for both, the six indicators and the LPI composite index as well.

The LPI composite is the weighted average of the score of countries in the six key dimensions, valued with a scale of 1 to 5:

1. Efficiency in the clearance of goods (i.e. speed, simplicity, time predictability and results) from control agencies at the border, including customs
2. Quality of infrastructure related to trade and transport (i.e. ports, railways, roads, information technology)
3. Simplicity to coordinate shipments at competitive prices (international shipments)

4. Competition and quality of logistical services (i.e. transport operators, customs agents)
5. Ability to track and locate shipments, i.e. traceability
6. Timelines in shipments to arrive to their destination within the schedule or expected delivery time

2.2.1 Mexico's performance

Table 2.14. shows the score that Mexico obtained in the years 2007, 2010, 2012 and 2014. Mexico is currently positioned at number 50. In order to reach the Vision of the Program, Mexico should be at least in the 20th position in this index. This is the position that Italy currently occupies.

The daring conclusion taken from the table is that every two years Mexico improves its performance; however other countries around the 50th position have performed even better, like Argentina, Vietnam, Lithuania, Panama and Greece. This is especially relevant in the case of Panama, which faces direct competition with Mexico to become the main logistics producer in the American continent for north-south and east-west trade.

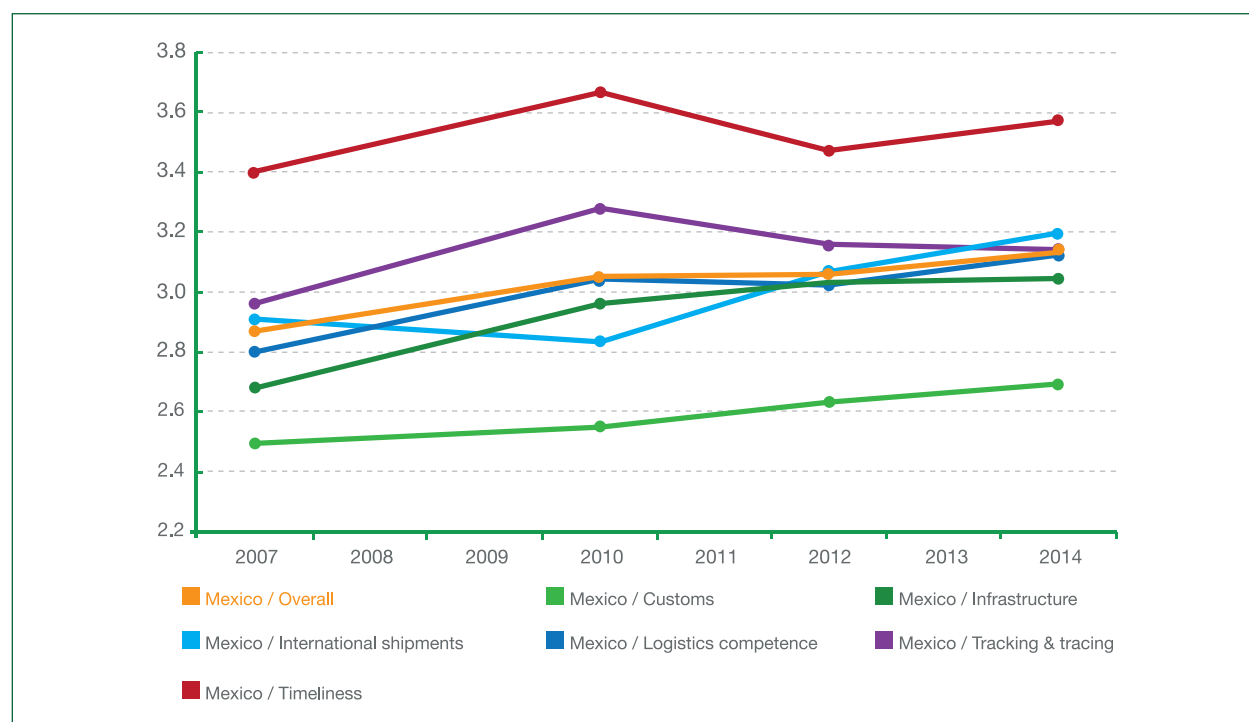
⁸ <http://lpi.worldbank.org/>

Table 2.14. Comparative of the LPI score for Mexico in publications 2007, 2010, 2012 and 2014, including the ranking of the country in 20th place .

		2007	2010	2012	2014	No. 20
General Score LPI	Score	2.87	3.05	3.06	3.13	3.69
	Lower Threshold		2.95	2.94	3.03	
	Higher Threshold		3.15	3.18	3.23	
General Score	Classification	56	50	47	50	20
	Lower Threshold		44	37	44	
	Higher Threshold		55	59	55	
	% that has a higher performance	58.6	65.7	66.0	68.2	
Customs	Score	2.50	2.55	2.63	2.69	3.61
	Classification	63	62	66	70	20
Infrastructure	Score	2.68	2.95	3.03	3.04	3.77
	Classification	53	44	47	50	20
International Shipments	Score		2.83	3.07	3.19	3.5
	Classification		77	43	46	20
Quality of logistical services	Score		3.04	3.02	3.12	3.71
	Classification		44	44	47	20
Traceability	Score		3.28	3.15	3.14	3.71
	Classification		45	49	55	20
Timeliness	Score	3.40	3.66	3.47	3.57	4.06
	Classification	51	54	55	46	20

Source: World Bank

Figure 2.15. Mexico's 2014 LPI Score.



Source: World Bank

The weakest factor is customs, followed by traceability and infrastructure. Mexico should invest in these areas to raise its corresponding score. At this time, Mexico just implemented a Single Window to reduce the load on administration at the border. However, the benefits of this investment will show themselves only after some time, due to the difficulties in the start-up of these types of projects. Likewise, the logistics infrastructure needs to improve: more paved roads and higher quality, so as to increase the processing capacity of the ports and intermodal terminals, particularly those that handle perishable goods. Also in the next decade an increase in traceability of products is required (tracking and locating). In comparison with Italy, currently 20th in the index, Mexico needs to significantly improve the scores of the 6 indicators in the next 15 years.

In the comparison between Mexico and Italy, we see the necessity to improve the traceability, the procedures in customs and competition amongst logistic services providers, which means more regulation (implementation of traceability standards along the chain, for example), adequate standards and regulations to facilitate trade (for example, trusted importer and exporter certifications) that create a more efficient logistical process.

The benefits of better logistical performance will also show in internal and external trade of agri-food products (less transport costs and quicker delivery times) and a more competitive position for Mexico in this sector, but its importance would not only be in this sector, also in all production sectors. Particularly for agri-food products, given its higher logistical cost in relation to its sale price, and in the case of perishable products, due to its short shelf life.

Figure 2.16. Comparative between Mexico and Italy in the 2014 LPI Score.



Source: World Bank

2.2.2 Conclusions

1. Mexico has improved its logistical performance over the last decade, but this is not enough. Mexico performs better in the LPI every two years; however it is not improving its deficiencies quickly enough to advance its position in comparison with other countries.
2. The most critical point is customs. Especially for the time it takes to complete the customs clearance procedures.
3. The following priorities are traceability and infrastructure and information systems related with logistics. Traceability of supply chains performs poorly in Mexico, such as ports, railways and roadway infrastructure, and information technology associated with its operation.
4. New regulation and a greater investment in infrastructure are needed. Achieving better logistical performance requires ample institutional coordination and regulatory changes to improve the customs processes and traceability, such as large investments in infrastructure.
5. Expected benefits of improved logistical performance. Achieving a better performance as measured by the LPI, means better results in internal and external trade, and a greater competitiveness for the country in all sectors. This is true for all types of exports, but particularly in the case of perishable products given their high logistical costs and short shelf life.

3 Roadmap 2018

3.1 Objectives of each Working Guideline for 2018

In order to achieve that the National Agrologistics Program contributes in an effective manner to accomplish the objectives of national interest described previously, it is necessary to establish concrete objectives in the short term. The Program proposes the following objectives and indicators for 2018 in agreement with the 5 Working Guidelines established:

WG1	An effective governance framework to discuss policies, development of technical solutions, and progress evaluations
	<p>1A. Establish the National Agrologistics Council</p> <p>1B. Establish a Technical Agrologistics Secretary</p> <p>1C. Create a Control Panel to inform and evaluate</p>
Objective	Results in 2018
<p>The objective of this Working Guideline is to achieve the necessary institutional coordination to make effective decisions during the startup phase of the Program. As is already established in the Diagnosis and Strategy Reports, this coordination is fundamental to implement the program. It is expected that this objective be achieved through 3 programed actions.</p> <p>⁹ See point 2.2 in the previous chapter for a description of the LPI indicators</p>	<p>1A. Establishing the National Agrologistics Council in the first quarter in 2016, after a 12 month dialog process between Ministries, involved government agencies (10 are estimated in total) and representatives from the private sector convened to a Sectorial Working Table. The Office of the President should lead the dialog process and carry out the Council's order as a result. The Council membership will be comprised of participants of the dialog process. Between 2016 and 2018, the Council will guide the progress of the Program in each of its areas and evaluate investment proposals of the Agrologistics Fund.</p> <p>1B. Creation of the Technical Agrologistics Secretary in the first quarter of 2015. The Secretary will have the mission to coordinate all technical jobs related with the implementation of the Program's Working Guidelines, report to the National Agrologistics Council and prepare the quarterly and biannual reports for the Congress and Specialized Cabinet.</p> <p>1C. Creation of a Control Panel for Agrologistics. The Control Panel will contain the necessary information to evaluate logistical performance of the agri-food sector in general and monitor the progress of the Program. The design will be finalized in 2015 and the measuring and obtaining of information will be done in 2016. The Board will be available to the private sector in the first quarter of 2017. It will be comprised of 2 types of information. In the first place, information about route options and logistics' costs (Listings of logistical service businesses and possibility of cost estimations and times); availability, prices and refrigerated storage location, inspection and verification points location along the chains, with the possibility to estimate transit times. In second place, information about management and decision making of the private sector comprised of 6 types of indicators compatible with the LPI index being used by the World Bank to measure logistical performance of countries⁹.</p>

2A. Create a pre-approval system at points of origin or consolidation of the chain based on risk management

2B. Standardize the quality of the packaging and tracing systems

2C. Develop a standardization strategy

Objective	Results in 2018
<p>The objective of this Working Guideline is to improve and harmonize the legislation and standardization of the agri-food chains. Remodeling of the laws and standards around quality and food safety is key to improve performance of chains and reduce logistic costs. These improvements are also essential to achieve the mutual agreements with America, Asia and Europe so that the certificates of products given in Mexico are recognized by countries in these regions, facilitating the access to these markets. The Program establishes the standardization of 50 priority products that can adhere to those agreements between 2015 and 2018.</p>	<p>2A. New regulation for sanitary inspections based on risk management. It includes the establishment of agreements between the Tax Administration Services (SAT), Ministry for National Defense (SEDENA), National Service of Agro Alimentary Health, Safety and Quality (SENASICA), Ministry of Health (SALUD), and Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA), for joint-inspections and pre-approval systems in points of origin or consolidation by authorized third parties. This action will create fewer inspections and make them more relevant. Also, this will generate less movement of refrigerated cargo due to the coordination of entities, and less possibilities of breaking the cold chain, all of this resulting in better quality and product safety. The proposed regulation will be designed in 2015 and will present itself for adoption in the first quarter of 2016.</p> <p>2B. Adoption of packaging standards and quality traceability by the main trading partners of Mexico, among them a universal tagging system with GS1 traceability. The implementation of the tagging project is scheduled for 2016.</p> <p>2C. Harmonization of national schemes for the certification and evaluation of the conformity of quality and safety standards, so that they can be recognized internationally. This action includes:</p> <ul style="list-style-type: none"> • New regulations for 50 priority products (according to 10-15 standards per year) • Supporting the establishment of a public-private accredited laboratory network for the creation of certifications

- 3A. Prepare a comprehensive master plan, including project prioritization
- 3B. Develop the building design and development and management models for Agrologistics and multimodal assets.
- 3C. Develop and implement framework agreements with state governments

Objective	Results in 2018
<p>The objective of this Working Guideline is the defining and effective planning of agrologistics infrastructure projects and the design of public-private participation plans for its construction and financing. The result is improved utilization of public resources through optimal distribution of assets, and with it an increase in private investment to give clarity and certainty to the creation of large-scale assets like agroparks under adequate operating rules.</p>	<ul style="list-style-type: none"> 3A. The elaboration and adoption of a Comprehensive Master Plan for the development of agrologistics assets. This Plan should create the improvements required in key port and transport infrastructure, like asset classes to develop along the chains: collection centers, agroparks, distribution centers, multi modal nodes and points of export. The identification of corridors, demand centers, productive areas and its deficiencies in connectivity, will be essential criteria for the prioritizing of products that can benefit with resources from the Agrologistics Fund of the National System of Agroparks. The Plan will be developed in 2015 and 2016. 3B. The development of standards for executive projects required in the construction of assets. These standards will include procedure manuals and guides for the defining of participation schemes for developers, investors and users. These works will be developed parallel to the Comprehensive Master Plan throughout 2015 and 2016. 3C. Collaboration agreements with state governments to promote support for common objectives and facilitate the execution of large-scale projects.

4A. Multiply investment resources through special purpose entities and the Agrologistics Fund

4B. Encourage business models and associations of small producers

4C. Establish auditable and transparent processes

Objective	Results in 2018
<p>The objective of this Working Guideline is to promote the investment of the agri-food chain, through the financing of infrastructure, associations or service projects and that they benefit along with the businesses that supply and make up the chain. The main instrument is the creation of the Agrologistics Fund and the design of Special Purpose Entities (EPE) to direct this investment. Yet, an incentive program is scheduled for organizations to group together small-scale suppliers, and the design of transparent processes for awarding resources and contracts that generate more trust in investment. Where relevant, changes to regulation of public-private organizations will be proposed to facilitate its adoption in development projects in the agrologistics chain.</p>	<p>4A. Creation of The Agrologistics Fund in the first quarter of 2015 with contributions of public funds of about \$2.400 million MXN in 4 years. Facilitation of private investment by means of Special Purpose Vehicles. The participation of private investment is expected to be increased in a 1:1 relation with respect to public investment.</p> <p>4B. Regional integration of small and medium agri-businesses in legal or trading entities, which will allow them to access the supply chain. The expected result is an increase in participant's income and a better training in postharvest handling and conformation to demand. An investment of approximately \$900 million MXN in induction programs is expected in order to reach 25,000 and 30,000 Rural Economic Units (RUE) from strata E3 (in transition) and E4 (companies with fragile income) in 4 years.</p> <p>4C. Establishment of transparent and easily audited processes in the framework of the National Agrologistics Program. Systemization of processes for the disposition of resources and service contracts related with the Program is expected, so that they will guarantee the correct allocation of contracts and ensure the quality of work. A greater level of trust in investment generated through transparency in public spending is expected.</p>

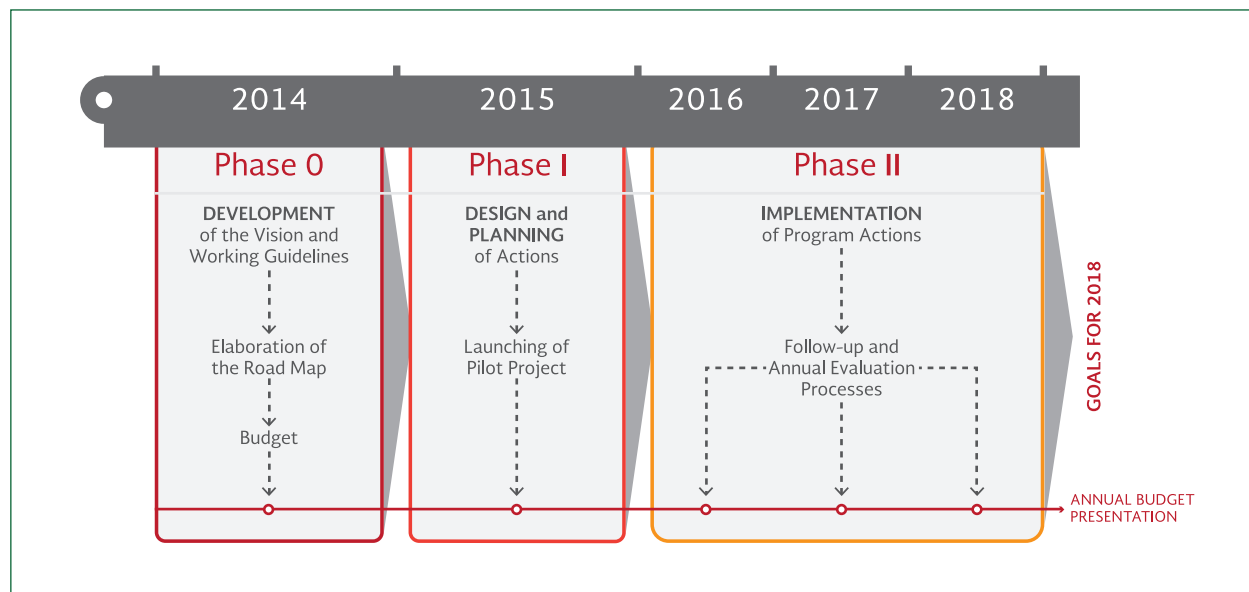
- 5A. Establish a modular training program based on Extensionism Networks
- 5B. Establish an inter-sectorial commission for supervising postharvest losses and waste
- 5C. Create an Agrologistics Network of Excellence for postgraduate studies and innovation

Objective	Results in 2018
<p>The objective of this Working Guideline is the investment of human capital and transfer of knowledge for a greater competitiveness in the sector, in the postharvest stage. The objective is achieved through 3 actions: the establishment of an Extensionism Network for the training of producers and agribusiness owners, the creation of a Postharvest Losses Management Commission in collaboration with SEDESOL and the National Crusade Against Hunger, and the investment in a functional postgraduate network that offers specialized training in agrologistics, and applied research lines that cover the necessities of the sector.</p>	<ul style="list-style-type: none"> 5A. Training in agrologistics and supply planning matters of 350,000 Rural Economic Units, which is the equivalent of 25% of strata E3, E4 and E5 in 4 years. Offer a certification scheme of producers for their integration into supply chains. 5B. Measurement and supervision of losses in the postharvest stage, through work in conjunction with technical groups of the National Crusade Against Hunger. The Program as a whole foresees a reduction of 10% of current losses in the internal consumer market in the first 4 years, estimated at 40% for perishable goods. 5C. Include Agrologistics as one of the priority subjects of National Council of Science and Technology (CONACYT). Creation of a network for programs and specializations in agrologistics in universities. Allocate \$64 million MXN in applied research and \$17 million MXN in study scholarships. This action also considers the creation of the Mexican Institute for Agrologistics (IMA) as a center for innovation and collaboration with businesses.

3.2 Preparation Phases (2014)

The Roadmap is composed of three phases for the period between 2014 and 2018: a preparatory phase, a design and planning phase, and an implementation phase.

Figure 3.1. Phases of the 2018 Roadmap of the National Agrologistics Program



3.2.1 Preparatory Phase (2014)

Duration: 12 months (in process)
Budget: \$24 million MXN

The preparatory phase starts in January 2014 with Diagnosis and Vision agreement works, articulated with the participation of high charges to the main public and private entities that form part of the agri-food

value chain. SAGARPA and 7 key players validated the subsequent Strategy report. This work culminates with the presentation of the Roadmap in September of 2014. Once the Roadmap is approved, it will require budget assignment for 2015 that will allow the Program to begin without delay. In order to start, the following results should be attained by the 4th quarter of 2014.

Table 3.2. Priority results for the 4th quarter of 2014

Priority	Result
1	Presentation and approval of the budget line for 2015, of \$1,150 million MXN
2	Creation of the Specialized Agrologistics Cabinet and the Sectorial Working Table. <ul style="list-style-type: none"> SAGARPA should create an inter-secretarial coordination agenda for the start of the Program in the Specialized Cabinet The Specialized Cabinet should convene with the Sectorial Working Table so that the agriculture, trading, transportation and services sectors speak with "one voice"
3	Establishment of the Technical Agrologistics Secretary dedicated to the coordination and tracking of the program

3.2.2 Phase 1. Design and Planning (2015)

Duration: 12 months
Budget: \$1,150 million MXN

The objective of this phase is to establish a solid framework of institutional cooperation, regulatory and planning for the implementation of the Program. The activities will include the completion of the preparatory works, obtaining institutional agreements and the launching of pilot projects. In agreement with the 5 Working Guidelines, 5 results have been identified for this phase, which are detailed here.

1. **An effective government framework** requires the public-public and private-private alignment as a prerequisite to public-private alignments. The concrete results led by SAGARPA are:

- Establishment of a dialog schedule between the Specialized Cabinet and the Sectorial Working Table, in the 1st quarter
- Launching of pilot projects, in the 2nd and 3rd quarters
- Presentation of the 2016 budget and assignment of resources in the 3rd quarter
- Public-private agreement for the installation of the National Council of Agrologistics in the 4th quarter

2. **Chain standardization** requires an adjustment of legislation and standards for the development of logistic activities, trade and exporting/importing goods and land use. The concrete results led by SAGARPA, to be evaluated in the 4th quarter and to be presented to Congress are:

- Revision and proposal of adjustment of the legal framework in relation to agrologistics, which will be comprised of 24 federal laws¹⁰
- Revision and proposal of adjustment of the legal framework in land development, which will be comprised of 13 federal laws¹¹
- Revision and proposal of adjustments in quality and food safety standards, so that they conform to certification standards¹²

3. **Planning and construction of agrologistics assets** require the elaboration of a Comprehensive Mater Plan and prioritizing of criteria based on geo-referenced information. The concrete results led by SAGARPA, to be evaluated in the 4th quarter includes the collection of initial data and the integration of a base line on the following measures:

- Identification and quantification of the current asset situation and conformation of logistics corridors: collection points in rural environments,

agroparks, distribution centers and consolidation of urban areas, regional multi modal nodes, and export points

- Identification and quantification of current and future logistical infrastructure, aligned with the National Infrastructure Program (PNI), National System of Logistics Platforms (SNPL) and National System of Agroparks (SNA)
- Analysis of existing corridors connectivity with demand centers, including (a) determining urban, regional and export demand centers; (b) Current flow and projections based on growth tendencies of demand and performance of the supply chain
- Determining areas with agrologistics power, including areas of high production capacity, high connectivity with demand and high concentration of manual labor and services
- Trends in the geographic distribution of economic, social, and environmental aspects: current and future productive areas based on the analysis of demand; current and future environmental services based on demographic growth trends and urbanization in the territory; economic and social profiles for the Rural Economic Units in the areas with agrologistics potential

4. **Promotion of investment** requires the defining of operative mechanisms between implementing agencies and different levels of government, and the facilitation of legal and administrative entities for the investment in chain assets and in associations. The concrete results led by SAGARPA are:

- The creation of the Agrologistics Fund with an initial investment of \$500 million MXN in the 1st half, meaning that it will have to be scheduled in the 2014 budget for the next year
- Design of the legal framework and incentives for the investment of assets through Special Proposal Entities or Vehicles, in the 2nd quarter
- Defining of participation schemes in the construction of developers', investors' and users' assets in the 3rd quarter
- Elaboration of a transparency protocol for resources allocations and service contracts related with the Program, in the 3rd quarter

¹⁰ The scope of this revision is detailed in Annex 11 of the Diagnosis Report.

¹¹ Especially in relation with the change and assigning of land uses for the development of agroparks and other agrologistic assets, the scope of this review is detailed in Annex 2 of this report.

¹² Especially related to packaging, tagging and traceability and streamlining of international standards.

5. The transfer of knowledge requires the government's commitment to build capacities and a cooperation framework agreement between education and research centers. The concrete results led by SAGARPA are:

- Work agreement with the Technical Group of Food Losses and Waste of the Ministry of Social Development (SEDESOL), which supervises Objective 4 of the National Crusade Against Hunger: "minimize the postharvest and food losses during storage, transport, distribution and trade", in the 1st quarter
- Framework agreement with the CONACYT and Universities for the creation of a functional postgraduate network, in the 1st quarter

- Design and installation of an Extensionism Network for the training in Agrologistics, in the 2nd and 3rd quarters
- Design and installation of the Mexican Institute for Agrologistics, in the 4th quarter

Definitely, 2015 is a key year for the success of the Program. Not only can the institutional coordination and executive capacity be drawn up to scale, but also these will be tested in priority pilot projects. This strategy will allow the evaluation of possible barriers in order to adapt the Program in the following years. The pilot projects will also have the ability to generate trust in the Program, which will help producers and other players to multiply the momentum initiated by the public sector.

Table 3.3. Priority pilot projects in 2015

Priority Pilot Projects	
1	Joint Customs inspection in SAGARPA-SENASICA-SAT refrigerated facilities
2	Preapproval program with inspection in the point of origin or consolidation: operate a point in existing facilities and create a new point
3	'Green line' in customs for trucks with preapproval certificates
4	GS1 coding protocol in 10 perishable product chains
5	Design and construction of a storage center model in a rural area with refrigerated facilities
6	Pilot route for short-sea transport to the United States. Example: fruit transport by ship from Veracruz to Philadelphia
7	Pilot route for railway transport to the United States. Example: transport of vegetables by train from Guanajuato to Chicago/Atlanta
8	Fast training modules in extensionism: training in communication abilities and supply planning for producers

3.2.3 Phase II. Implementation (2016–2018)

Duration: 36 months
Budget: \$3,700 million MXN

The implementation phase lasts 36 months. It starts in January 2016 and ends in December 2018 with the Presidential Term change. The main objectives of this phase are the consolidation of the National Agrologistics Council as a result of the institutional dialog process, the adoption of legislation and standards reforms designed in the previous phase, and putting in practice the planning instruments and pilot projects under the coordination of the Technical Secretary. Additionally, a continued investment in training and research development is expected, such as the promotion of investment through the Agrologistics Fund and the incentives to the association of small producers. The most relevant concrete results by year are:

In 2016

- Establish the National Agrologistics Council
- The approval by Congress and adoption by the sector of the pack of legislative and regulatory harmonization
- The presentation of the Comprehensive Master Plan for agrologistics assets
- The continued implementation of pilot projects for inspections, packaging, traceability, and routes, and logistics services
- The first students to enroll in the specialized agrologistics postgraduate program
- The Agrologistics Fund reaches \$1,000 million MXN

In 2017

- The presentation for the Tracking Program Board
- Continued planning including the elaboration of directory plans of regional scope and local plans for strategic projects.
- The continued implementation of pilot projects for inspections, packaging, traceability, and routes, and logistics services
- The Agrologistics Fund reaches \$1.6 million MXN
- Presentation of the postharvest losses survey results, the relevant recommendations and its consulting system

In 2018

- The Extensionism Network reaches a capacity of 350,000
- The associations incentive program reaches between 25,000 and 30,000 REU
- 1st integral evaluation of the Program, based on the elaborated transparency protocol in the design phase
- The first generation of postgraduate students, which enrolled in 2016, ends.
- The second generation of the postgraduate program in agrologistics starts
- The Agrologistics Fund reaches \$3.200 million MXN

While in the previous phase the majority of the measures are led by SAGARPA, in the second phase the assignment of resources and responsibilities to other organizations and levels of government is planned, such as public-private agencies.

3.3 The Program in detail: 15 Actions to perform in 4 years

This section details the 15 Actions that comprise the Program. Following the format of the Technical Sheet that was described in the Methodology Section in Chapter 1, the objectives, results and deliverables of each Action are elaborated on. Such as the work agenda, program of activities and their timing, the entities that lead or participate in the process, relevant dates and the indicative budget to carry out the Action.

ACTION 1A	ESTABLISH THE NATIONAL AGROLOGISTICS COUNCIL
WORKING GUIDELINE	WG1. AN EFFECTIVE GOVERNANCE FRAMEWORK TO DISCUSS POLICIES, DEVELOPMENT OF TECHNICAL SOLUTIONS, AND PROGRESS EVALUATIONS
CONTEXT	<p>The National Agrologistics Council is the institution in charge of strategic planning and proposing policies for the new agrologistics program in México. It involves all the interested stakeholders of the agrologistics chain.</p> <p>It shall hold periodic meetings during the year. With the unanimous decision of all the Council members, extraordinary meetings can be held. Although the Council has a continuous mandate, its Terms of Reference and scope of work shall be reviewed every three years. The Executive Committee shall meet three times per year during the session periods to prepare the agenda for the Council meetings.</p> <p>As a prerequisite to the formation of the Council integration of a Specialized Cabinet by the Office of the President is required, to meet officials of the first level of the relevant Ministries for the Agrologistics. Parallel participation is required of the private sector in a Sectorial Working Table, in order to have a voice in the presentation of the problems and give relevant solutions for all the stakeholders in the sector.</p>
ACTION OBJECTIVES	<p>Constitute a group with the participation of the different stakeholders (P. e.g., government agencies, private sector and others) guided by the vision of a competitive and sustainable agri-food sector that offers proposals on how to take better advantage of the agrologistic potential of the sector, ensuring the availability of high quality food at affordable prices in our country, and heading México to an international leadership.</p>
RESULTS	<p>All the stakeholders of the agri-food sector in the formulation and implementing actions regarding operative issues related to:</p> <ul style="list-style-type: none"> • Dialogue and agreements between all the stakeholders to propose public policies for the sector • Coordination among the different government agencies around the necessities of Agrologistics • Optimize the agrologistics value network • Harmonize quality and safety standards • Analyze, assess and if necessary, propose the agrologistics infrastructure for the new needs of the country • Actively participate in the National Development Plan <p>While in terms of strategic management:</p> <ul style="list-style-type: none"> • Alignment and coordination of the public and private sectors • A technical structure defined to support the National Agrologistics Council
DELIVERABLES	<p>Six-monthly report to SAGARPA regarding the status of agrologistics in Mexico including the following topics:</p> <ul style="list-style-type: none"> • Review of the progress in implementing the Mexican agrologistics policy. • Recommendations on how to improve the effectiveness and efficiency of the Mexican agrologistics chain, including investment priorities • Follow up of the agreements in the Sectorial Working Table • Measures needed to be adopted on the basis of forthcoming editions and regional and/or international trends • Approval of pilot projects with demonstrative purposes that involve several sectors and actors, in order to be financed by the Agrologistics Fund • Tool to evaluate the Council management

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
1A1. Project Preparation. Create the Specialized Cabinet and the Technical Secretary within the structure of the Federal Government with the support of the Office of the President and SAGARPA, as well as the Sectorial Working Table with the different actors.	•	•	•	•							
1A2. Establishment of the Council. Establishing the National Council of Agrologistics the Office of the President, in collaboration with SAGARPA. Signature of the agreements of collaboration.	•	•	•	•							
1A3. Institutional design of the Council. Define the Council's institutional design, organizational structure and powers; as well as the tasks and responsibilities of each member of this Council.			•	•	•	•					
1A4. Management agenda. Define the work agenda. Open the dialogue with the interested parties regarding policies and propose alternative solutions to the issues being discussed.				•	•	•					
1A5. Council continuity. Ensure the Council continuity based on an objective evaluation of its performance.						•	•	•	•	•	•

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL	
SAGARPA through the Specialized Cabinet.	Office of the President plus 10 Ministries and Governmental agencies: SAGARPA, SENASICA, SE-DGN, SHCP, SAT, SEDENA, SCT, SEDATU, SEGOB, CJEF, and representing the private sector all the main involved parties and the actors that contribute to the functioning of the Mexican agrologistics chain.	In the first place, the Mexican citizens are the ultimate beneficiaries of the Council's labor because they shall benefit of fresher food, at better prices. In the second place, the participants will obtain a more efficient agrologistics chain and a better macro-economic environment due to higher competitiveness in Mexican agri-food sector exports.	<p>The National Agrologistics Council shall establish its head office at SAGARPA. The operating extensions shall be directed to the state delegations of SAGARPA in coordination with the State Secretariats of Rural Development.</p>	
			INDICATIVE BUDGET	
			<p>The annual budget is \$ 3,656,500 MXN to cover the costs of the Council relating to the preparation and printing of reports, meeting expenses (room rental, materials, catering) and expenditure on research and external inputs. An annual increase of 4% inflation is considered.</p>	
DATES			2015	\$ 3'656,500
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	2016	\$ 3'802,760
1st half 2015	2nd half 2015	2018	2017	\$ 3'954,870
RESPONSIBLE UNIT			2018	\$ 4'113,065
SAGARPA, Office of the President			TOTAL	\$ 15'527,195

ACTION 1B	ESTABLISH A TECHNICAL AGROLOGISTICS SECRETARY
WORKING GUIDELINE	WG1. AN EFFECTIVE GOVERNANCE FRAMEWORK TO DISCUSS POLICIES, DEVELOPMENT OF TECHNICAL SOLUTIONS, AND PROGRESS EVALUATIONS
CONTEXT	<p>The Technical Agrologistics Secretary (TAS) is the coordinating and executive entity that implements the policies and decisions taken by the National Agrologistics Council.</p>
ACTION OBJECTIVES	<p>The objective of the Technical Agrologistics Secretary (TAS) is to coordinate and manage all the actions of the Program and provide substantive services required by the National Agrologistics Council, as well as providing the evidence base on which the Council will formulate its decisions on policies and recommendations.</p>
RESULTS	<p>The Technical Secretary will strengthen the National Agrologistics Council structure, providing support to its administration, which will be reflected on:</p> <ul style="list-style-type: none"> • Decision making that is technically substantiated • Timely and available information • Follow-up of agreements, resolutions and other decisions • Foster direct, timely and objective communication and coordination between the interested parties • Establish the methods, formalities, and necessary requirements of the proposals made by the Council • Establish the basis for the Council's budget schedule
DELIVERABLES	<p>The Technical Agrologistics Secretary (TAS) shall be responsible for:</p> <ol style="list-style-type: none"> Preparing and disseminating the previous, actual and subsequent documents related with the quarterly meetings of the National Agrologistics Council Identifying the multi-sectorial pilot projects for the Council's approval and that shall benefit from seed capital or financing from the Agrologistics Fund Administering the Agrologistics Fund <p>The Technical Secretary shall be responsible for the following documents, including but not limited to:</p> <ul style="list-style-type: none"> • Written agenda for each of the Council meetings • Analytic reports, position reports, and their political recommendations commissioned by the Council • Recommendations arising from special meetings of groups/ experts • Results from regular reviews, studies and evaluation surveys • Special studies on best practices worldwide, innovation and agrologistics trends • Feasibility studies for pilot projects that shall benefit from seed capital or financing from the Agrologistics Fund • Tool to evaluate the Council administration

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
1B1. Receive the necessary information inputs for the implementation of the Technical Agrologistics Secretary.	•	•	•								
1B2. Establish the Technical Secretary.	•	•	•	•							
1B3. Define the scope, roles and responsibilities of the Specialized Cabinet as well as the Technical Secretary.		•	•	•							
1B4. Create and arrange the work agenda for the National Agrologistics Council.		•	•	•	•	•					
1B5. Apply operating protocols. Generate permanent information as well as initiatives.		•	•	•	•	•					
1B6. Identify and manage the resources needed to operate the National Agrologistics Council , as well as its Committee and the Technical Secretary.				•	•	•	•	•	•	•	•

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL	
SAGARPA supported by the Specialized Cabinet and the Office of the President.	Office of the President, SAGARPA, National Agrologistics Council.	The first beneficiaries of the Technical Agrologistics Secretary (TAS) are the National Agrologistics Council and their members whom shall have access to better information, knowledge exchange and a better understanding of the common problems and challenges as well as the specific problems and challenges of each stakeholder.	Head Office: The Technical Agrologistics Secretary (TAS) shall operate from SAGARPA.	
DATES			INDICATIVE BUDGET	
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	This budget estimates an annual amount of \$11,522,800 USD for salaries for a 15 people staff of the Technical Secretary and operating expenses. An annual increase of 4% inflation is considered.	
The Technical Agrologistics Secretary (TAS) has to be established at least three months before the National Agrologistics Council, this means, on the 1 st half of 2015.	2 nd half of 2015	Twice a year	2015	\$ 11,522,800
			2016	\$ 11,983,712
			2017	\$ 12,463,060
			2018	\$ 12,961,583
RESPONSIBLE UNIT			TOTAL	\$ 48'931,155
SAGARPA and National Agrologistics Council (evaluation)				

ACTION
1C

CREATE A CONTROL PANEL TO INFORM AND EVALUATE

**WORKING
GUIDELINE**

WG1. AN EFFECTIVE GOVERNANCE FRAMEWORK TO DISCUSS POLICIES, DEVELOPMENT OF TECHNICAL SOLUTIONS, AND PROGRESS EVALUATIONS

CONTEXT

The National Agrologistics Control Panel is a virtual platform that shall provide an analytical evidence base for the National Agrologistics Council, the Technical Agrologistics Secretary (TAS) and third parties.

This is a medium term measure, because the first tasks are to evaluate the availability and current use of data and information in all the linked sectors and key actors, their willingness to submit information on a regular basis, as well as to share data with all the jurisdictions and users. This task can be performed once the members of the National Agrologistics Council understand the advantages of having this platform and becoming active participants in the process of its creation and use.

It is proposed that the relevant information of the Control Panel includes the main topics of the Logistics Performance Indicator report of the World Bank:

- Efficiency of the customs clearance process
- Quality of transport infrastructure and IT technology for logistical services
- Ease of international transport operations
- Competence of the local logistics sector
- Traceability and tracking of international shipments
- Internal costs in logistics (transport)
- Timely arrival of shipments at the point of destinations

**ACTION
OBJECTIVES**

Provide a system and a single space for decision making, based on the information and data belonging to Agrologistics in México.

RESULTS

The expected outcomes are better informed decisions and recommendations made by the National Agrologistics Council, more efficient use of resources and assets by the key actors in the agrologistics chain, new opportunities regarding research, innovation and enterprises in all fields related to Agrologistics (agriculture, economy, marketing, environmental planning and management, transport, energy, water, etc.)

- A measurement instrument, which will provide more information to the decision-makers about the progress of the actions of the Program
- Enables the use of the statistics of imports and exports for the follow-up of goals
- Reports relevant cost information and the location of facilities for the agri-food products management
- A tool that will link market data, policies and budget allocations

DELIVERABLES

The National Agrologistics Control Panel will be a GIS and interactive data platform that allows researchers and trained users to enter, access, make references and cross tabulations in several data and information forms related to Agrologistics, and display the results:

- General working plan to conduct a diagnosis study of the current situation
 - Based on the Diagnosis Report, the design of the Control Panel will be enriched
 - Identifying best practices of existing portals
 - Identifying information not available and its potential sources
 - Identifying users' needs
 - Cost estimation and project time
- General plan for the pilot project
- Strategic proposal to deploy a Control Panel
- Estimate final project costs
- Tool to evaluate the Control Panel's effectiveness

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA			2014	2015					2016				2017	2018
			IV	I	II	III	IV	I	II	III	IV			
1C1. Evaluation of the data and information sources.			•	•	•	•								
1C2. Terms of Reference of the Control Panel. Establish Terms of Reference by the National Agrologistics Council.			•	•	•	•								
1C3. Planning of the Control Panel. Set the stages of progressive implementation of the Control Panel, including pilot projects.				•	•	•	•							
1C4. Information management. Develop an existing information management system: <ul style="list-style-type: none">• Availability of information. Make available information for producers on different channels and devices• Access to information tool. Create a visualization tool for the available information• “Big Data” tool. Create an analytical tool of “Big Data” that links market data, policies and budgetary allocations				•	•	•	•							
1C5. Supervision of the development of the Control Panel. Provide resources to the Technical Secretary to hire and supervise development of the Control Panel.				•	•	•	•							
1C6. Training for decision-making. Enable users to apply information to decision-making and prepare user guides for using the Panel and its tools.						•	•	•						
1C7. Interfaces for evaluation for decision making. Develop interfaces for the evaluation of the Program for decision-makers and provide market information to producers.								•	•	•	•	•	•	
1C8. Dissemination and communication. To inform the main users on the availability of the tool and facilitate its use.												•	•	
MEMBERS			SCOPE											
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL											
SAGARPA through the Technical Agrologistics Secretary (TAS), SIAP.	Members of the National Agrologistics Council, ASERCA, SENASICA, SCT, SIAP.	Direct and indirect participants of the agri-food chain: services providers, producers, traders, logistics agents, agro-industrials, etc.	Head Office: SAGARPA											
			INDICATIVE BUDGET											
			The budget includes \$9 million MXN per year for the diagnostic study and data collection, as well as the development and evaluation of the tool of the Control Panel, with annual increases of 4% for inflation.											
DATES														
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	2015					\$ 9'000,000						
1 st quarter 2015	1 st quarter 2016	2018	2016					\$ 9'360,000						
			2017					\$ 9'734,400						
RESPONSIBLE UNIT			2018					\$ 10'123,776						
SAGARPA			TOTAL					\$ 38'218,176						

CONTEXT

The quality of perishable products depends on the cold chain's continuity. Therefore, it is essential to avoid breaking the supply chain from its point of origin until its destination. Once the load has been pre-cooled in the place of origin, whenever phytosanitary¹ and customs inspections of the product are carried out simultaneously at the time of loading, the certified sealed product may be transported to its destination with minimal chances of interrupting the chain.

An approach based on risk management, which means that the exporting companies are to be themselves in charge for the inspection of their products, improves the performance of the supply chain. Since the party assuming the risk of the product's rejection is the same corporation, this reduces the burden on the authorities. All pre-approval costs are therefore the responsibility of the private agent, and thus these schemes also ensure greater efficiency of public resources.

This evaluation system shall allow to apply the pre-approval system at origin, thus consolidating simplified controls on the destination country, in accordance with the international agreements signed with the main business associates of México (US, Japan, European Union, China and Latin America), and from mutual recognition when using risk based approaches and trade certificates of trust (for example: C-TPAT, AEO, among others).

It is important to indicate that Mexican legislation must adapt itself to enable the creation of joint inspection teams and to align its agencies, as well as to carry out inspections at the origin or consolidation points.

¹ Comprising phytosanitary and animal health inspections.

**ACTION
OBJECTIVES**

Obtain three improvement levels on the inspection systems in a gradual manner:

1. Coordinate SENASICA, SAGARPA, SAT and SEDENA joint teams to execute custom, phytosanitary and military joint inspections. In this case, these inspections would be conducted in one place only, with appropriate facilities and reducing time and costs otherwise originated from multiple displacements between several locations, and without breaking the cold chain.
2. Conduct joint pre-approval inspections in origin or consolidation points. This requires a greater investment and initial coordination between agencies and teams of inspectors, but offers great benefits in the medium term.
3. Implement an inspection system based on risk management. This implies that only a sample of the load would be verified pursuant to the risk allocation for that particular product. The same companies or other third parties shall be authorized to conduct the inspections once more at the place of origin. In that regard, inspection costs would become a part of the quality control costs of the companies, and as a result, the current costs of inspection shall be largely reduced.

It is proposed for the three levels, to develop pilot projects, among them: new pre-approval points and preferred line for trucks in cross borders.

RESULTS

The expected benefits are:

- Keep the cold chain closed, preserving product quality
- Reduce product transit time
- Reduce product exportation costs
- Decrease the stock list throughout the chain (cost reduction) for the traders
- Create an open market for inspections run by certified third parties, which should decrease custom transit prices in almost 20%

DELIVERABLES

- Evaluation of the regulatory framework for enforcing joint teams and pre-approvals
- List of inter-agency collaboration agreements to implement the proposed action
- Pre-approval technical protocol for points of origin
- Category lists of priority products for this action
- Strategic proposal to locate these points of origin
- Design and planning of the requested cooling refrigerated facilities, or specifications for those existing facilities
- Profile and references terms for authorized third parties
- Implementation and evaluation of the pilot projects

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
2A1. Subscribe cooperation agreements. Identify and convene the stakeholders to create joint teams so that they can carry out the joint inspections.	●	●									
2A2. Design a pre-approval points system. Establish a pre-approval system, including identification of points to be developed, protocols and creation of inspection joint teams.	●	●	●	●	●	●					
2A3. Legal and regulatory framework. Analyze and suggest all the legal and regulatory amendments required to enforce a pre-approval system. Prepare the proposal within the framework of the inspection system based on risk management.		●	●	●	●						
2A4. Implementation of pilot projects. The construction and operation of facilities at the point of origin and a preferential line for trucks at cross borders.				●	●	●	●	●	●	●	●
2A5. Operating mechanism for authorized third parties. Develop standards and the accreditation and certification procedures for authorized third parties.						●	●	●	●		
2A6. Single Window. Increase the Single Window functionality, bearing in mind inspection at origin and standardizing operating schedules.						●	●	●	●		
2A7. Creation and certification of bonded warehouses. The construction of a bonded warehouse that will be developed as project pilot.						●	●	●	●		
2A8. Make electronic data exchange compatible. Standardize the electronic exchange with US-CBP and CBSA in the medium term and within the framework of the NAFTA.						●	●	●	●	●	

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL	
SENASICA, SAGARPA.	SAT, SE, SEDENA, National Standardization Council for Corporate Competitiveness.	All the participants of the agri-food chain, including the final consumer.	Head office: SAT	
			INDICATIVE BUDGET	
			Included in the budget are design and annual maintenance of the pre-approval system of \$10 million MXN the 1st year plus yearly maintenance, two pilot programs: \$ 10 million MXN yearly for preferred truck line starting the first year, \$ 30 million MXN yearly for inspection stations starting the second year. It is considered an annual inflation rate of 4%.	
DATES			2015	\$ 20'000,000
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	2016	\$ 46'800,000
1 st quarter 2015	1 st quarter 2016	2018	2017	\$ 42'416,000
RESPONSIBLE UNIT			2018	\$ 44'112,640
SAT and SENASICA			TOTAL	\$ 153'328,640

CONTEXT

Proper packaging of perishable products is essential to preserve their quality. It is also essential that the packaging protects the integrity of the product according to the highest standards available, and ensures the conditions needed for their cold storage.

Harmonization of quality standards in packaging and labeling for their traceability requires regulatory changes. Defining these standards shall benefit from the participation of the industry.

Collaboration with other departments:

The Directorate General of Standards of the Ministry of Economy is working on the following projects, which shall be coordinated with this action. It is proposed that DGN-SE shall lead the technical aspects together with the Directorate General of Agri-food Standardization DGNA-SAGARPA, for the design and the updating of standards.

- Intelligent data codes (for example QR or bar codes) with GS1 information
- Creation of a platform to expedite the dialogue with those corporations in charge of final marketing of perishable products and certified laboratories in charge to harmonize the certification schemes

**ACTION
OBJECTIVES**

- For national markets, especially for the part of the chain that goes from wholesalers to retailers, introduce the use of standard plastic boxes¹ and other quality standards to handle perishable products
- For international markets, harmonize the packaging standards of the main trading partners, mainly the United States but also GlobalGap, BRC (British Retail Consortium) and IFS (International Food Standard)
- As for traceability, introduce smart labels with GS1 information, establishing operating and information links with the Single Window, and sanitary and customs inspections

¹ Sturdy and foldable plastic boxes are widely used throughout Europe. In certain countries they are color-coded for fruits and vegetables and other perishables. As containers, boxes are part of the equipment grouping systems.

RESULTS

In 2018:

- An implemented regulation to provide unique schemes for information exchange (traceability) and packaging of perishable products from the farm to the retailer
- Mutual recognition of Mexican standards in the main international markets
- Adaptation of a harmonized label for the commercial sector, using data codes with GS1 information

Projection of results within the scope of traceability:

- In 2018: traceability standards adopted
- In 2024: perishable products, 50% adopted
- In 2030: 75% adopted in all groups of perishable groups using the most advanced codes or RFID

DELIVERABLES

- Creation of a platform to adopt standards, homologation and accreditation of the packaging of perishable products, mobilized by corporations in the industry
- Design of the harmonized label with data code
- Design of quality packaging standards for 10 perishable products
- Multi-user system for returnable packaging (boxes/crates) implemented for 10 priority products of the national market (retail), co-financed by the private sector, to be evaluated in 2018
- Pilot traceability projects to be evaluated in 2018

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
2B1. Platform for Packaging Quality. Its mission is to identify, design and agree packaging standards with the corporations being a crucial element in order to improve product management, with the purpose of ensuring preservation of their quality.	•	•	•	•	•	•	•	•	•	•
2B2. Adopt a smart labeling system that allows harmonized traceability with international standards. Adopt the most used traceability standard by our main trading partners, which, in its turn, is harmonized with international standards. This shall cover the production activities from farm to retailer and shall be used by all Mexican agencies.	•	•	•	•						
2B3. Pilot projects on traceability for the domestic market. Collaboration with producers, traders, shippers, wholesalers and retailers in implementing traceability projects for perishable products (for example, a label that provides the necessary information regarding product compliance with applicable standards and regulations, in addition to the data required by consumers, retailers and authorities, by means of data codes), and place the brands NOM (Official Mexican Standard) and NMX (Mexican Standard) as a sign of confidence that distinguishes product quality and safety in the domestic and international market. Establish information links with the Single Window (SW) and sanitary and customs inspections.					•	•	•	•	•	•
2B4. Harmonize packaging standards with international markets. Homologate the packaging standards with respect to the criteria of the main trading partners, especially United States but also Global Gap, BRC (British Retail Consortium) and IFS (International Food Standard), for international markets.			•	•	•	•	•	•	•	•
2B5. Design packaging standards for 10 perishable products. Create quality packaging standards for 10 priority products for domestic consumption, with participation of the commercial sector. Pilot Project: Returnable packaging systems. Implement a multi-user returnable packaging system (boxes/crates) for the 10 priority products in the national market, co-financed by the private sector, to be evaluated in 2018.	•	•	•	•	•					

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL	
DGN-SE, DGNA-SAGARPA.	GS1, EMA, SENASICA, CNA, platform of corporations including the packaging sector.	All participants in the agri-food industry.	Head Office: SAGARPA. Platform for Packaging Quality: offices in Mexico City.	
			INDICATIVE BUDGET	
			This budget includes \$5 million MXN yearly for the platform to adopt standards, \$5 million MXN yearly for the design of the harmonized label in the 1st year, \$10 million MXN for the design of packaging standards of 10 products in the 1st year. \$39.4 million MXN pilot traceability projects and \$79.3 million MXN for a multiuse returnable packaging system. It is considered a 4% annual increase of inflation.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st quarter 2015	1 st quarter 2016	2018	2015	\$ 52'850,000
			2016	\$ 70'678,000
			2017	\$ 15'408,000
			2018	\$ 16'024,320
			TOTAL	\$ 154'960,320

CONTEXT

Alignment of product quality and safety regulations in Mexico with main international standards shall allow the producers to export immediately and shall guarantee that their product's certification shall be recognized in the destination countries.

Mexico, to become a worldwide leader in agri-food products exports, requires the supply chains that are aligned with:

- International standards for perishable products according to the Codex Alimentarius, UN/CEFACT and US-CBP, USDA
- Internationally acknowledged certificates for Good Agricultural Practices: Global GAP, International Food Standard (IFS), Global Food Safety Initiative (GFSI), Safe Quality Food (SQF), British Retail Consortium standard (BRC), Hazard Analysis and Critical Control Points (HACCP), ISO 22000, etc.
- Management initiatives from the International Coordinated Border of the World Customs Organization

These purposes require a team of intergovernmental coordination and high level international relationships. This team shall report to the Office of the President every six months.

ACTION
OBJECTIVES

- Create a Work Team for Agri-food Standardization within the National Agrologistics Council. This group shall be responsible for the strategic agenda for standardizing agri-food products. Their priorities are:
 - Mutual recognition negotiations concerning the certifications issued by Mexico in America, Asia and Europe
 - Positioning the brands NOM and NMX as a symbol of trust that distinguishes Mexican products in the domestic and international markets
- Synchronize the standards and national conformity evaluation schemes, and align them with international standards and trends to remove unnecessary trade procedures, consequently benefiting entrepreneurs and consumers, and assuring food quality and safety
- Develop a structure to evaluate those standards and regulations which may be necessary, and take advantage of existing structures such as laboratories, verification units and competent agencies or accredited certification organizations, both for the public or private sector, as enforcement bodies to ensure food quality and safety (pursuant to NOM and NMX), that simplify and minimize procedures and supervisions from all the authorities and participants of the sector

RESULTS

- Mutual recognition agreements with America, Asia and Europe in order to achieve recognition from those countries regarding agri-food certificates issued in Mexico, aiding access to the market and vice versa. A group of 50 priority or highly potential products shall be identified, and shall be the object of the recognition agreements for the time period 2014-2018

DELIVERABLES

- Work Team for Agri-food Standardization. Its objective is to convene the key participating actors in standardization issues, commission appropriate studies, generate technical recommendations, disseminate the "NOM" seal and evaluate and report the progress of the National Agrologistics Program's goals.
- Other deliverables for the Work Team: studies and convening of experts to develop the test methodologies needed to fulfill the standards. Drafting manuals and systematizing processes.
- A study of current law and regulatory baselines regarding the quality and safety of agri-food products in Mexico.
- Development of regulating standards, regulatory impact analysis and testing methods for 50 products in 4 years.
- Homologation processes for national certification schemes.
- Organize 2 training and comparison annual events where international laboratories participate in order to achieve reciprocal acknowledgment of qualified Mexican laboratories.
- Develop infrastructure and equipment in qualified laboratories, and provide training for its use

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA			2015				2016				2017	2018
			I	II	III	IV	I	II	III	IV		
2C1. Create an Agri-food Standardization Work Team. Its goal is to combine the key participating actors in standardization issues, commission studies, generate technical recommendations, and evaluate and report the progress.			●	●								
• 2C1.a Disseminate the NOM seal.				●	●	●	●	●	●	●	●	
2C2. Harmonize standards and evaluation schemes to obtain their domestic and international recognition.												
• 2C2.a A study of current law and regulatory baselines.			●	●	●	●						
• 2C2.b Develop regulating standards, regulatory impact analysis and testing methods for 50 priority or highly potential products in international markets in 4 years.			●	●	●	●	●	●	●	●	●	
• 2C2.c Homologation process for certification schemes. Purpose: to create a standard or unique brand aligned with international standards and trends.							●	●	●	●	●	
2C3. Develop a certified unit network to evaluate the conformity.												
• 2C3.a Domestic and international reciprocal acknowledgment of accredited Mexican laboratories to evaluate conformity. Organize 2 training and comparison events per year with the participation of international laboratories.					●	●	●	●	●	●	●	
• 2C3.b Develop infrastructure and equipment in qualified laboratories, and provide training for its use.			●	●	●	●	●	●	●	●	●	
MEMBERS			SCOPE									
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / INTERNACIONAL									
DGN-SE, DGNA-SAGARPA.	SENASICA, COFEPRIS, EMA, CNA, organized traders, organized retailers.	All the actors participating in the supply chain.	Head office: Mexican Accreditation Entity (EMA). Alternating meetings at EMA and SAGARPA.									
			INDICATIVE BUDGET									
			This budget includes \$12.5 million MXN yearly for the standardization work team, \$12.5 million MXN yearly for the dissemination of the NOM seal. \$5 million MXN in the 1 st year for the study of the legislative environment, \$12.5 million MXN yearly for the normalization of regulatory laws for 50 products, \$2.5 million MXN yearly for the homologation of certification schemes, \$30 million MXN yearly for training and comparison events and for laboratory equipment. It is considered an annual inflation rate of 4%.									
DATES												
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION										
1 st quarter 2015	1 st quarter 2016	2018	2015				\$ 75'000,000					
			2016				\$ 72'800,000					
RESPONSIBLE UNIT			2017				\$ 75'712,000					
SAGARPA (DGNA)			2018				\$ 78'740,480					
			TOTAL				\$ 302'252,480					

CONTEXT

Agriculture, understood to be the traditional and extensive use of the soil is undergoing deep transformations. Precision technology such as hydroponic greenhouses point to an intensive use that does not depend on soil's quality, which opens new opportunities in agricultural land planning. Agroparks are a clear example, where one can find an intensive production, transformation, logistics and marketing on one location in metropolitan and semi-rural areas.

In 2010 Mexico saw more than 15 thousand hectares of precision crops across the country, and in 2013 the value of the greenhouse's crops and floriculture amounted to more than \$8,000 million¹. Planning of the value chain of these emerging assets requires deep knowledge of the territorial conditions, and precise understanding of their economic viability and physical distance to the market. Based on these developments, the Program intends to establish geographic criteria for project prioritizing by means of a Comprehensive Master Plan:

- The Comprehensive Master Plan shall provide the basis for an efficient agrologistics value chain that responds to the vision of placing Mexico among the leaders of the sector worldwide
- The Plan is a dynamic tool that supports decision-making in programming investments in infrastructure and territorial development

¹INEGI, National Accounts System of Mexico. Accounts for goods and services, reviewed in 2012, basic version 2008.

**ACTION
OBJECTIVES**

- A better planning to provide infrastructure and agrologistics and multimodal assets throughout the country with a long-term vision
- Criteria to prioritize public investment and greater security for private investment
- Better coordination of measures and communication between federal entities and authorities that govern development of land, infrastructure and natural resources: SCT, SEDATU², SE, SEMARNAT, SEMAR, SENER, CONAGUA and Port Authorities. The production of the Plan requires a great institutional coordination and at the same time it can boost communication and coordination among participant entities
- Linking with other Programs, especially the National Infrastructure Program and National System of Logistics Platforms including the consolidation of resources.

² For example, in the case of SEDATU, mapping the location of the agrologistics nodes can be a valuable tool for the evaluation of territorial development policies such as Rural-Urban Systems (SUR) and integrated urban development (DUI).

RESULTS

- In the territorial dimension, the Plan must identify nationally consumer areas, production areas, facilities to process and handle existing products, already planned facilities, available road and rail infrastructure, and multimodal clusters as well as ports, airports and border crossings. Reserving land for the facilities and infrastructure needed for medium and long-term must be considered, and identify a designated use of land compatible with SEDATU regulations
- Within the extent of feasibility, and based on current and future demand, the Plan must identify business and management models for the assets; define criteria and incentives for developers that build these assets, and requirements for those producers that make use of them. In addition to the scientific basis, the feasibility study should be completed with contributions from the interested parties by means of a participatory process
- The National Agrologistics Program must be linked to the National Infrastructure Program and the National System of Logistic Platforms, Thereby, it must seek to combine financing sources from various agencies. Creation of a common investment database allocated to projects related with agrologistics assets should be an essential and practical first step
- The Plan must take advantage of the technical studies of other already operating Programs and data and information produced by government institutions such as SEDATU, SCT, SE, INEGI, SIAP, and ASERCA, among others

DELIVERABLES

The Comprehensive Master Plan at federal level:

- Analysis and diagnosis of the current situation in its territorial and economic dimension from the perspective of demand
- Proposal of intervention areas and criteria to select strategic projects, in other words, their localization, corridors and clusters that have development and financing priority
- Inter-sectorial planning strategies
- Terms of reference to produce regional master plans and local action plans
- This project should be used also to create, in collaboration with SIAP, a geo-referenced database for decision-making

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
3A1. Mandate to convene the stakeholders and request information. Establish collaboration agreements between the stakeholders to share the information required to develop the Plan.	●	●								
3A2. Territorial diagnosis. 1. Mapping of the infrastructure required by agrologistics activities 2. Main demand centers per product 3. Main production and management center 4. Corridors and articulation points of demand along the chain 5. Ports and customs, import and export point 6. Project current and future cash flows based on demand 7. Identify high potential agrologistics areas for strategic projects (agrologistics corridors) 8. Margin for updating and improving existing the infrastructure (connectivity gaps, bottlenecks)	●	●	●							
3A3. Links to other federal Programs: PNI and SNPL		●	●	●	●					
3A4. Economic diagnosis. Business cases are required to justify the investment. The Plan must identify investment and management patterns for assets, define criteria and incentives for developers that build these assets, and requirements for producers that make use of them.				●	●	●	●			
3A5. Design of the regulatory framework. Identify the legal instruments needed to develop the projects, soil change processes or special land use designations compatible with SEDATU regulations.	●	●	●	●	●	●				
3A6. Prioritize the Agrologistics Fund as a result of territorial planning. The Plan must provide criteria to prioritize resources to the Technical Secretary, which is responsible of managing the Agrologistics Fund.					●	●	●	●	●	●

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / REGIONAL	
Technical Secretary of the National Agrologistics Council.	SAGARPA, SCT, SEDATU, SE, SENER, CONAGUA, SENASICA, sector of transport, CNA, corporations, university planning departments, state governments.	Users and operators of the supply chain, authorities at ports, railways, airports, agroparks, warehouses and state governments.	The project shall be coordinated by the Technical Agrologistics Secretary, with the participation of other Ministries, particularly SCT and SEDATU. Head Office: SAGARPA	
			INDICATIVE BUDGET	
			The budget includes \$20 million MXN on the 1st year to develop the Plan and \$15 million MXN yearly for its management, continuous development and drafting of planning tools that would govern planning at regional and local levels starting the 2nd year. This budget takes into account a 4% annual inflation rate	
DATES			2015	\$ 20'000,000
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	2016	\$ 15'000,000
1 st quarter 2015	1 st quarter 2016	2018	2017	\$ 15'600,000
RESPONSIBLE UNIT			2018	\$ 16'224,000
Technical Secretary			TOTAL	\$ 66'824,000

ACTION 3B	DEVELOP THE BUILDING DESIGN AND DEVELOPMENT AND MANAGEMENT MODELS FOR AGROLOGISTICS AND MULTIMODAL ASSETS
WORKING GUIDELINE	WG3. PLANNING AND CONSTRUCTION OF AGROLOGISTICS AND MULTIMODAL ASSETS IN STRATEGIC LOCATIONS
CONTEXT	<p>For the initial stage of the 2014-2018 National Agrologistics Program a contribution of public funds to build agrologistics assets is estimated to be close to \$ 2,400 million MXN (\$190 million USD), and with the \$4,600 million already destined to the National Agroparks System for the same period, represents an investment of over \$7,000 million MXN in agri-food chains. According to the magnitude of the investment, it is essential that the allocation of these resources are guided by clear and well-timed operating rules.</p> <p>Developing this type of projects is new, and therefore there are no previous references that assist these guides. Likewise, since the public sector has decided to assume its leadership in land development and infrastructure development, it is necessary to develop protocols for the role of developers of this new class of logistics projects, their responsibilities and what they must require from the rest of the participants in the process and from their consultants.</p> <p>In the developing Agroparks in Mexico, the public sector has also led joint venture agreements with anchor corporations (SAPIs) that are emerging as partners for the entire investment by means of financial trusts. This financing scheme continues to be uncertain for investors, due to the lack of precedents in Agroparks design and its eventual return on investment. Consequently, transparent schemes with incentives are required to guide and smooth private investment and the creation of APPs between SAPIs and the government.</p> <p>This measure proposes to define the Terms de Reference for both the preliminary and feasibility studies, master plans, and engineering that are the key inputs to achieve these projects and their evaluation as investment.</p>
ACTION OBJECTIVES	<p>The objective is to guide the design and planning of agrologistics assets. According to the National System of Logistics Platforms, a logistics platform is defined to be “a nodal multi-customer infrastructure that takes advantage of the freight breaks in transport and logistics chains to focus on added value technical activities and functions.”</p> <p>A platform specialized in perishable products can combine logistics and production functions with customs and sanitary inspections or regional coverage services such as multimodal change terminals and irradiation chambers. These would be an array of infrastructure and facilities (refrigerated warehouses, yards, intermodal terminals, office buildings, greenhouses, production or processing plants, etc.) where optimization of good flows is obtained and supplying services are facilitated by a ‘clustering’ effect.</p> <p>The specific purposes to develop agrologistics assets are:</p> <ul style="list-style-type: none"> • Provide competitive and quality land that allows developing logistics activities related with perishable products • Generate loyalty flows in a specific area and attract new flows, facilitating a change in mode of transportation. • Reduce infrastructure investment • Promote the area socio-economically by means of creating jobs and improving competitiveness • Provide added value integrated services that offer better quality to production and logistics processes
RESULTS	<ul style="list-style-type: none"> • Criteria to define executive projects of the different parts of the National Agrologistics Program. This study shall define the different types of agrologistics assets such as cold storage collection centers in production areas, selection, classification and pre-cooling facilities, Agroparks, multimodal nodes, distribution centers, and port facilities. • Criteria to define financing models and incentives, which shall determine the needs for return on investment, and the way to manage and operate these assets.
DELIVERABLES	<ul style="list-style-type: none"> • Terms of Reference for contracting preliminary studies. Definition of the type of asset, program of uses, schedules (master plan) and sizing. • Procedure Manual for public developers. Models for territorial planning, land development and management of assets by means of Special Purpose Vehicles (VPE). • Participation scheme, business model, and incentives for key investors and key infrastructure operators • Participation scheme and incentives for enterprises and logistic service providers. • Participation scheme for small and medium producers or associations • Incentives for universities, research and training centers • Incentives for users of multi-customer services

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA			2015				2016				2017	2018
			I	II	III	IV	I	II	III	IV		
3B1. Prioritize the allocation and exercise of financial resources from the Agrologistics Fund. Prioritize the allocation and exercise of financial resources needed for agrologistics assets, based on those that have proved their value by means of a business plan. The purpose is to avoid investing in dysfunctional assets and monopolistic chains that deviate from the general interest. This action is developed in parallel with the mapping information of the Comprehensive Master Plan (Action 3A).			•	•	•	•						
3B2. Define the Terms of Reference to hire studies and construction projects. These studies include the analysis of demand and feasibility of lands, planning services, design and construction engineering services of the infrastructure and logistics facilities, as well as the construction and management.			•	•	•	•	•					
3B3. Procedure Manuals for public developers. Models for territorial planning, land development and management of assets by means of VPE.					•	•	•	•				
3B4. Participation scheme and incentives for anchor investors and key infrastructure operators. These can act as partners or licensees. It requires research of the business model and territory development.							•	•	•	•		
3B5. Participation scheme and incentives for corporations and users. These shall be installed in the project with their own facilities, logistics services suppliers, producers and associations, universities and training centers, as well as users of multi-customer facilities.							•	•	•	•		
3B6. Operation of pilot projects and systematization of experiences. Define, plan and implement pilot projects, so that the design initially established might be adjusted upon their results, and likewise demonstrate their commitment to the sector and the public opinion with the implementation in the short term.						•	•	•	•	•	•	
MEMBERS			SCOPE									
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL									
Technical Secretary of the National Agrologistics Council.	Development Bank, state governments, private sector, developers.	State governments, authorities at ports and corridors.	Head Office: Office of the Technical Secretary for the National Agrologistics Program									
			INDICATIVE BUDGET									
			This budget includes \$10 million MXN yearly (2015-2016) for the elaboration of criteria studies, participation schemes and incentives and \$7.2 million MXN for the follow-up and systemization of pilot projects (2017-2018). This budget considers an annual inflation rate of 4%.									
DATES												
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION										
1 st quarter 2015	1 st quarter 2016	2018	2015		\$ 10,000,000							
			2016		\$ 10,400,000							
RESPONSIBLE UNIT			2017		\$ 3,536,000							
Technical Secretary			2018		\$ 3,677,440							
			TOTAL		\$ 27'613,440							

ACTION 3C	DEVELOP AND IMPLEMENT FRAMEWORK AGREEMENTS WITH STATE GOVERNMENTS
WORKING GUIDELINE	WG3. PLANNING AND CONSTRUCTION OF AGROLOGISTICS AND MULTIMODAL ASSETS IN STRATEGIC LOCATIONS
CONTEXT	<p>Conferring competences and responsibilities to state governments is an important step to facilitate the execution of the National Agrologistics Program. This requires developing and implementing framework agreements based on the Comprehensive Master Plan and the definition of the agrologistics corridors (Action 3A), and operating rules for the executive project of the assets that make up the system (Action 3B), which specifies how each of them should be built and managed.</p> <p>Since both instruments have been developed with the participation of state governments, this collaborative precedent shall facilitate the accountability of state governments. CONAGO's leadership in designing and implementing such agreements assures that all state government's actions are aimed to achieve common objectives and prevents internal competition.</p>
ACTION OBJECTIVES	<p>This is a core action in the process of establishing a National Agrologistics Council. Within its scope are:</p> <ul style="list-style-type: none"> • Creating a space for institutional dialogue, which leads to agreements that engender balance and optimal allocation of the Agrologistics assets included in the Comprehensive Master Plan. • Support CONAGO's mission and promote the consolidation of Mexican states as critical actors in this process so they may add considerably to regional and national development and count with resources and responsiveness to meet the demands of their entities, coordinated through the agrologistics corridors. • Propose the design of inclusive and commonly agreed programs that meet the productivity, regulatory, infrastructural and organizational demands of the agri-food sector. • Propose the design of inclusive and consensual programs that meet the demands of the agri-food sector in terms of productivity, regulations, infrastructure and organization. • Promote strengthening a new relationship of respect and collaboration between government levels and the private sector. • Hasten the development of sea ports, airports, roads, rails, agroparks, collection centers, rural transforming centers and other assets that shall be provided to achieve this goal by means of common agreements
RESULTS	<ul style="list-style-type: none"> • Harmonious understanding between the different government levels. This means direct and active communication between each pair and with the Federation. • A clear delineation of power and responsibilities for each federal entity and for the Federation itself. • Propose the required legal amendments to build an appropriate legal framework within which this proposal will be fulfilled. • Agreed decision-making regarding plans, goals, commitments and financial contributions which each federal entity will provide to the Agrologistic infrastructure projects. • Objective assessment regarding the evolution of each measure, whether already implemented or being implemented. • Cross convergence of federal and interstate financial resources surrounding the Agrologistics corridors.
DELIVERABLES	<ul style="list-style-type: none"> • Operational and procedural guidelines to implement projects of Agrologistics assets and infrastructure development by the state governments, aligning regional development with federal planning through master plans and the defining of Agrologistics corridors. • Guidelines for implementing phases and Special Purpose Vehicles (VPE), in relation to contracting works, development of managing asset models and establishment of public-private partnerships. • System indicators based on logistic and financial performance of measurable assets from the objectives of the National Agrologistics Program
PILOT PROJECT	<p>Recommended preparatory meetings between the Federation and the legal state delegations with a proposed agenda that includes:</p> <ul style="list-style-type: none"> • The analysis of current regulations and possible adjustments for the implementation of this action. • The session to share prior experience with public - private development agreement

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
3C1. Coordination with state governments. Establish the participation and commitment of each party. Functions, responsibilities, and management scope. Mainly regarding agreements covering the location of Agrologistics infrastructures with regional scope. Commitments regarding the amounts and participation practices in the projected investments in agreement with the Master Plan and the defining of the Agrologistics corridors.	•	•	•	•	•	•	•	•	•	•
3C2. Review of the current legal framework for implementing assets. Review or create instruments to implement the assets executing projects in the states, including planning processes and requesting permissions.	•	•	•	•	•	•				
3C3. Required process needed by state governments to hire the asset constructive design. Establish the work process needed by state governments to commission asset design.		•	•	•	•					
3C4. Identify the origin of available programs and resources. Align the objectives and scope of existing programs with the goals of this initiative, increasing resources.		•	•	•						
3C5. Creation of operating manuals. Design and implement Procedural and Operating Manuals for each process of the different type of assets. Use the systematization of pilot experiences as a baseline.					•	•	•	•		
3C6. Technical support for project completion. Offer technical support to state governments to establish institutions for project completion, as well as business models to manage assets, developing thus public-private partnerships.					•	•	•	•	•	•
3C7. System indicators. Introduce key performance benchmarks to evaluate the asset development process.							•	•	•	

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / STATE	
National Agrologistics Council, CONAGO.	The state governments and the Federation supporting the achievement of common goals. Private organizations shall complete surveys to assess the scope and implementation feasibility in the short, medium and long terms.	State government, infrastructure and assets developers and operators working in compliance with these operative guidelines. Also: producer associations, service providers, agro-industries, logistics companies, input suppliers, training centers, traders and consumers in general.	Coordination is carried out at CONAGO with the active participation of state Economic and Rural Development Ministries.	
			INDICATIVE BUDGET	
			The budget includes \$5.1 million MXN in legal and administrative consultation and continuing agreements in relation to the state government framework agreements. 50/50 participation between federal entities and federal government is expected. This budget accounts for a 4% annual increase of inflation.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st half of 2015	1 st half of 2017	2018	2015	\$ 5'150,000
			2016	\$ 5'356,000
			2017	\$ 5'570,240
			2018	\$ 5'793,050
RESPONSIBLE UNIT			TOTAL	\$ 21'869,290
CONAGO, state governments via the Secretaries of Rural Development, National Agrologistics Council				

ACTION 4A

MULTIPLY INVESTMENT RESOURCES THROUGH SPECIAL PURPOSE ENTITIES AND THE AGROLOGISTICS FUND

WORKING GUIDELINE

WG4. PROMOTE A BUSINESS MODEL BASED ON DEMAND, BENEFICIAL AND OPEN TO ALL PARTIES

CONTEXT

The agrologistics assets to be built in the states shall be developed by implementing institutions specially designed to this purpose, and that, thanks to the contribution of the private sector, shall multiply public investment. These implementing institutions, since they are focused on specific projects, may be more efficient in terms of technical and administrative tasks.

In addition, international experience shows that complex projects in which different actors are involved, benefit by establishing dedicated offices for project management (PMO, its acronym in English), composed by experienced and full-time staff, in charge of carrying out the different aspects of the projects.

In case the project is expected to be developed within a period of time longer than 3 years, or complex financing mechanisms from different sources are required, as will be the case of establishing agrologistics networks, then it is advisable to use Special Purpose Vehicles (VPE), and for the project management and operation Special Purpose Entities (EPE).

Likewise, the National Agrologistics Council shall have the mandate to create an Agrologistics Fund, as a common investment fund for infrastructure or financial trusts, which initially shall have a capital of \$500 million MXN per year. In order to multiply investment resources, try new technologies and launch logistics services by means of the following functions of the Special Purpose Entities:

- Finance agrologistics assets (fitting of agroparks, cold storage, inspection centers, bonded warehouses, multimodal terminals)
- Seed capital to test new technologies, by integrating pilot projects
- Seed capital to develop new services as well as shipping and rail routes

ACTION OBJECTIVES

- Multiply investment resources by means of institutions that direct private investment quickly and effectively
- Maximize available resources for the agri-food industry in the development bank and public sector by means of the Agrologistics Fund. Together, the VPE and EPE these can be efficient financial leverage mechanisms and to attract resources from different sources, such as multilateral development agencies (BID, World Bank), privates corporations, and government and financial institutions

RESULTS

- Develop strategic logistics nodes, among which agroparks deserve special recognition
- Seed capital for pilot projects relevant to the National Agrologistics Program strategies
- Increased available funding to develop assets of the National Agrologistics Program

DELIVERABLES

- Create the Agrologistics Fund integrated with mixed capital including corporations of the agri-food sector, banks, development agencies, the government and associations of producers. For specific projects, VPE/EPE shall be created by relevant groups of investors under the guidance of the Fund, and may have access to the Fund's capital to the extent that their project meets the necessary requirements
- The Executive Board of the Fund shall be inclusive and reflect the collection of public and privates associations present in the VPE/EPE projects, regardless of their equity magnitude or participation
- VPE/EPE's legal and financial design, to promote productive business models that shall encourage the investment in assets and infrastructure by agri-food corporations and banking industry. These shall include: definition of the proposal modalities to investors
- Legal certainty to investors of the VPE/EPE, definition of responsibilities for each actor and definition of surveillance mechanisms
- Seed Capital Fund for strategic public infrastructure and to trigger important logistics services for the strategies proposed to the Council

It is estimated that after 1 decade of operation the Fund shall be able to manage an investment volume of up to \$13,000 million MXN (\$1 billion USD) distributed in projects throughout the country, and shall count with foreign direct investment contributions.

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
4A1. Technical Secretary as the coordinating and monitoring body. Establish the Technical Secretary as the coordinating and monitoring body of the different Special Purpose Entities in states and municipalities.	●	●								
4A2. Creation and Operation of the Agrologistics Fund. Define the purpose of the Fund, its relationship with the implementing institutions (VPE/EPE), operating rules and the members who make up the executive committee. Coordinate with Action 3B to define qualified projects that may access the Fund. Its creation is in charge of the banking sector, however, management of the Fund and coordination of the implementing institutions is carried out by the Technical Agrologistics Secretary.	●	●	●	●	●	●	●	●	●	●
4A3. Competences of Special Purpose Entities. Define specific competences of the Special Purpose Entities (EPE), for example, construction and operation of agrologistics assets.		●	●	●						
4A4. Reforms to the Public and Private Associations Law. Propose the required changes to the Public and Private Associations Law, based on the competencies defined for the EPE.		●	●	●	●					
4A5. Governance model for Special Purpose Entities. Define the governance and management model of these institutions, specially pointing out how decisions shall be made, so that the parties shall have a weight of opinion proportional to their contributions. It is necessary to consider that these business and management models should encourage investment.				●	●	●	●			
4A6. Procedures to attract private investment. Develop a model of procedures to attract private investments by the EPE, to be added to the contributions of state governments and SAGARPA.			●	●	●	●				
4A7. Coordination of financing sources. Coordinate with the development bank, SHCP and SE, the operating financing of EPE.			●	●						

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / REGIONAL	
National Development Bank, with SHCP and SAGARPA who request the seed capital of the Fund during the first 4 years.	Companies in the agri-food industry, banks, investors, development agencies and associations of producers.	Everybody investing in infrastructure of the sector that participates in the Fund or in its VPE/EPE for a specific project.	Coordination of VPE/EPE by means of state and regional delegations of the development bank (Financiera Nacional, FIRA, FIRCO, FOCIR, etc.) Head Office of the Agrologistics Fund: offices of the National Development Bank.	
			INDICATIVE BUDGET	
			This budget consists of \$500 million MXN yearly as a contribution to the Agrologistics Fund. This budget takes into account a 4% annual inflation rate.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st quarter, 2015	1 st quarter, 2016	Annual	2015	\$ 500'000,000
			2016	\$ 550'000,000
			2017	\$ 605'000,000
			2018	\$ 665'500,000
RESPONSIBLE UNIT			TOTAL	\$ 2'320,500,000
Development Bank				

ACTION 4B	ENCOURAGE BUSINESS MODELS AND ASSOCIATIONS OF SMALL PRODUCERS
WORKING GUIDELINE	WG4. PROMOTE A BUSINESS MODEL BASED ON DEMAND, BENEFICIAL AND OPEN TO ALL PARTIES
CONTEXT	<p>The development of business models based on association includes the definition of incentives and training for those producers with insufficient cash flow to deal with the possible costs of using the assets.</p> <p>If the models are defined by small and medium producers, rather than imposed by the government, the possibilities to integrate them to the value chain shall be higher. Developing business models that allow the use of agrologistics assets is a critical goal for the Program. Public policies must be clear and transparent, with decisions based on technical facts regarding the costs of use and location of the assets.</p> <p>The models to be developed and the associations of producers should be geared to meet the market demands. As well as planning infrastructure and facilities should be made on a scientific basis and respecting the products and markets, the producers and SMEs should be prepared to group their activities around them.</p> <p>In this line, a target population of 970,725 economic units that belong to the E3 and E4 Rural Economic Units strata defined by FAO is estimated.</p>
ACTION OBJECTIVES	<ul style="list-style-type: none"> • Provide strategic orientation of the economic organization of rural producers in order to operate as a corporation, with coordination among departments • Adopt profitable business practices by small agricultural entrepreneurs • Promote partnership work, complement strengths and minimize weaknesses among small agricultural entrepreneurs, by means of appropriate business models • Include 10% of the target population in schemes of associated producers in 15 years • Raise the average sales revenue for 10% of the target population to the next higher strata
RESULTS	<ul style="list-style-type: none"> • Regional integration of small and medium agricultural entrepreneurs in legal and commercial schemes • Participation of small and medium agricultural entrepreneurs in the National Agrologistics Plan • Increase the percentage of small agricultural entrepreneurs in the farming contract modality • Associations of producers that reach a minimum area of 150 ha • Administrative and legal training of inducing agents • Business training for managers of new associations
DELIVERABLES	<ul style="list-style-type: none"> • A collaborating model, including a standard common needs document, with organizational bases and constitutive processes for economic association of small agricultural entrepreneurs • Training modules in business plan and joint investment designs • Agreements with chain investment cores in assets, such as agroparks, to execute pilot projects • Incubation areas for the associations where business consultancy is provided
PILOT PROJECT	<p>Consider the ongoing building of agroparks as a basis in order to stimulate the integration of productive chains and/or rely on already established associations of producers:</p> <ul style="list-style-type: none"> • Select a product category and identify opportunities of inclusion with corporations prospected for agroparks • Associativism induction course for producers. Adoption of the proposed model • Reserve the resources available to provide agroparks services at reduced costs for associations of participating users • Agroparks Service User Association (AUSA)

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
4B1. Signing collaboration agreements. Document agreements between SAGARPA, SE, the Development bank, IICA and rural development organizations, companies and associations of producers. Find investors in agroparks and collection centers investment projects in rural areas.	●	●	●	●	●					
4B2. Develop the business model. Coherent joint work to identify the best business model and the legal scheme for different situations, in order to implement this initiative.		●	●	●	●					
4B3. Disseminate the Associativism proposed model. Inform SMEs regarding opportunities for collaborative business work and the benefits available						●	●	●	●	●
4B4. Define incentives for small producers and SMEs to use agrologistics assets. Coordinate incentives with the development bank destined to associations of small producers and SMEs, in order to use agrologistics assets.			●	●	●					
4B5. Leading corporations assisting small producers. Encourage leading corporations to assist small producers to integrate themselves, transferring management skills, and sharing market technology and knowledge.			●	●	●	●				
4B6. Pilot projects. Demonstrate and ensure results through pilot projects, as well as systematize and disseminate the best practices.			●	●	●	●	●	●	●	●

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / STATE / MUNICIPAL	
SAGARPA	SAGARPA delegations, SE, Development Bank, IICA, INCA Rural, agri-food industry corporations, development agencies, associations of producers.	Small and medium producers across the country.	Design of incentives and budgetary basis provided by SAGARPA. The incentives and training programs shall be managed by SAGARPA delegations in the states and facilities within their own municipalities.	
			INDICATIVE BUDGET	
			This budget includes \$3 million MXN for the training of 625 agents inducted in the 1 st year, and \$1 million MXN for each year subsequently, \$34.5 million MXN to boost training for 1,380 associations in 4 years with incentives for association, including management and legal costs, \$103.5 million MXN yearly for incentives for meeting the demand, and \$3.45 million MXN yearly for business training for managers of new associations. This budget takes into account an annual inflation rate of 4%.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st quarter, 2015	1 st quarter, 2016	2018	2015	\$ 144'450,000
			2016	\$ 148'128,000
			2017	\$ 154'053,120
			2018	\$ 160'174,445
RESPONSIBLE UNIT			TOTAL	\$ 606'805,565
SAGARPA				

CONTEXT

The starting point to ensure that public and private money is well invested is to have a conception based on demand, which allows identifying markets with a high potential regarding imports and exports. Transferring the capital of the public inversion's private members and making the business model of agrologistics assets advantageous for all the parties, requires clear game rules.

It is also important to ensure that public resources are used efficiently, guaranteeing proper Program execution; in such a way that its activities are upheld by the users, beneficiaries and the public in general.

This implies creating auditable and transparent processes to develop and operate agrologistics assets, opening business opportunities and diminishing any options for corruption and obscure decisions.

ACTION
OBJECTIVES

- Establish easily auditable and transparent processes within the National Agrologistics Program.
- Build a foundation of trust
 - Ensure cleanliness and impartiality when granting resources through a public process
 - Ensure the quality of the Program's service providers through a transparent selection process and based on robust criteria
 - Offer advice to improve the internal control of the institution
 - Develop a system of timely and reliable data to validate, control and plan resources
 - Provide a standardized process for project development and delivery of resources.

RESULTS

- Optimize invested resources
- Evaluate the fulfillment of the established objectives
- Ensure quality in the resource allocation processes and contract awards.
- Transparency and enablement in the Program's accountability

DELIVERABLES

- Manual of criteria to grant public resources to the National Agrologistics Program for projects.
- Procedural bidding manual for companies related to agrologistics assets such as engineering and design, developers, construction, investment management and financing
- Evaluation protocol for the performance of agrologistics assets:
 - Being built / in construction
 - Currently operating

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
4C1. Mandates and commitments. Formalize cooperation between SFP and SAGARPA to define best practices and process designs.	●	●	●	●						
4C2. Establish criteria to grant financial assistance to agrologistics asset developers with public resources.			●	●						
4C3. Bidding system for agrologistics assets. Define a quick, transparent and homogenous bidding system across the national territory to govern contracting of building, operation and maintenance of agrologistics assets at state level.			●	●	●	●	●	●	●	●
4C4. Synchronize procedures. Integrate the audit schemes with the Public Works and Related Services Law, the General National Assets Law, the Law of the Professional Career Service in the Federal Public Administration, the Federal Law for Budget and Fiscal Accountability and other laws, regulations, decrees, agreements and orders from the President of the Republic.		●	●	●	●					
4C5. Evaluation. The Technical Secretary shall run regular evaluations regarding the progress of agrologistics assets.									●	●

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL	
Responsible units, with SFP guidance.	SFP, SAGARPA, Technical Agrologistics Secretary, state governments, developers, building and engineering companies, investors, operators.	Each participant in the processes where public funds are used, and above all, taxpayers in the country.	Head office: SFP offices and the Technical Agrologistics Secretary. Following up of projects provided by SAGARPA branches and state governments.	
			INDICATIVE BUDGET	
			The budget comprises formulating criteria to grant resources, design of a bidding system, and following up and project evaluation protocols with an initial investment of \$ MXN 10 million in the 1st year. In the following years, \$5 million MXN per year to cover expenses for operating costs, building of regional and state teams and federal project monitoring. This budget takes into account an inflation rate of 4% per year.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st Quarter, 2015	1 st Quarter, 2016	2018	2015	\$ 10'300,000
			2016	\$ 5'000,000
			2017	\$ 5'200,000
			2018	\$ 5'408,000
RESPONSIBLE UNIT			TOTAL	\$ 25'908,000
Secretary of Public Administration - SAGARPA				

ACTION 5A	ESTABLISH A MODULAR TRAINING PROGRAM BASED ON EXTENSIONISM NETWORKS
WORKING GUIDELINE	WG5. BUILDING OF HUMAN CAPITAL AND EFFICIENT TOOLS FOR DISSEMINATION AND FOLLOW-UP OF INFORMATION
CONTEXT	<p>Innovation and Knowledge Transfer is one of the three strategic pillars in the National Agrologistics Program. Pursuant to this pillar, the Program shall encourage the alignment of the sector with their human capital development, producing knowledge, training, productivity and competitiveness. This requires investment in training and technology and management applications for the different phases of the system, particularly when planning the supply and transport of perishable food. This investment shall produce a genuine transference of ownership and knowledge to the actors in the agri-food chain, mostly to producers and entrepreneurs who are the chain's beginning point and have enormous influence on product quality.</p>
ACTION OBJECTIVES	<p>Offer training in marketing, distribution and postharvest handling topics to the producers categorized in stratum E3, E4 and E5 of the Rural Economic Units¹ through short courses and using educational technology platforms, in order to increase the operating capabilities of producers and involved actors in agri-food product trading. To achieve higher efficiency, the project shall use the extension networks that are already available.</p> <ul style="list-style-type: none"> • Create a professional profile for the Rural Economic Units selected as target population, constituted by 1.4 million people • Reach 25% of the target population in the first 4 years • Create programs to develop technical capacities in postharvest handling and marketing in the target population • Introduce a scheme for technical and business education of the sector • Increase the practical knowledge of the selected topics in the target population <p>¹ See the definition of the REU stratification: FAO, Diagnosis of rural and fishing sector in Mexico 2012 (SAGARPA, 2013), 19.</p>
RESULTS	<p>The expected outcome is to have qualified actors in the commercialization of agri-food products, enabling them to make more accurate and efficient decisions with positive results for their competitiveness and incomes.</p> <p>Specific results:</p> <ul style="list-style-type: none"> • Boost producer capacities to maximize postharvest economic yields. • Professionalization of the agri-food sector; skilled producers in agri-food technical topics and business topics • Scheme for certification of producers
DELIVERABLES	<p>Courses with a duration time of 20 to 40 hours, that shall cover key subjects concerning postharvest handling and planning based on marketing. The main goal is that the extension workers or the leaders of existing producer networks may gain knowledge and become experts. These trained actors, in turn, shall teach other producers and actors in a multiplying training scheme.</p> <ul style="list-style-type: none"> • Specific scheme to instruct producers <ul style="list-style-type: none"> • Catalog of courses to be taught (for example, postharvest handling and losses, transport management) • Document covering the criteria to define the academic-professional profile of trainers and participating institutions. • Agenda to implement and execute the modular skill development plan • Strategy to advertise the programs • Budget related to the program • Estimate the amount of certified producers <ul style="list-style-type: none"> • Economic impact of the certification • Yield rates of product handling and trading
PILOT PROJECT	<p>Training Course of Communication and Planning skills for supply. Goal: Increase the planning skills of small and medium producers so they can deliver their products on time and under adequate conditions.</p> <ul style="list-style-type: none"> • Select the region / initial entity for implementation – SAGARPA • Deciding the sample size – DGTA • Identify and localize the target population in the region • Recruitment of teachers / instructors • Develop specific contents for the region – SAGARPA / DGTA • Enable the requested infrastructure • Joint call – SAGARPA / DGTA • Delivery of courses – DGTA • Pilot assessment – COPAES

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
5A1. Integrate the Academic Commission for Agrologistics Training. Establish a coordinating commission integrated by SEP and SAGARPA.	•	•	•	•	•	•					
5A2. Prepare a relevance study. Validate the creation of instruction programs.		•	•	•	•						
5A3. Train teachers and create contents. Define the teacher's profile in academic and professional competences. As well as to identify general programs needs and particular characteristics of each region.	•	•	•	•	•	•	•	•	•	•	•
5A4. Establish workshops, online courses and promotion of instruction programs.					•	•	•	•	•	•	•
5A5. Management and decisions for pilot test and evaluation. Definition of priorities regarding subjects, regions and financial resources for the pilot tests to be executed during the implementation stage.			•	•	•	•					

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / STATE	
SEP - SAGARPA, having as operators the INCA Rural and other organizations. Support from the Directorate of Agricultural Technological Education (DGTA) in the design phase.	SAGARPA, SEP, INCA, DGTA, (Directorate of Agricultural Technological Education), stakeholders of the sector but not public entities, such as independent producers, producer associations.	Firstly, the direct and indirect participants of the whole productive chain. Ultimately, the consumers who shall obtain better products, with higher quality and lower prices.	The implement management of this measure can be conducted at the INCA Rural headquarter, with extensions in the different academic fields of the states. It is advisable that DGTA Academic Bodies shall develop the design phase.	
			INDICATIVE BUDGET	
			This budget consists of \$ MXN 212,823,900 yearly to start 20 – 40 hour training courses on Agrologistics and postharvest management in an extensionism network that includes 88,677 people, with the goal of reaching 25% of the target population by the end of four years. This budget accounts for an annual increase of 4% inflation.	
DATES				
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION		
1 st Quarter, 2015	3 rd Quarter 2015	Annual	2015	\$ 212'823,900
			2016	\$ 221'336,856
RESPONSIBLE UNIT			2017	\$ 230'190,330
			2018	\$ 239'397,943
			TOTAL	\$ 903'749,029
SAGARPA				

ACTION 5B	ESTABLISH AN INTER-SECTORIAL COMMISSION FOR SUPERVISING POSTHARVEST LOSSES AND WASTE
WORKING GUIDELINE	WG5. BUILDING OF HUMAN CAPITAL AND EFFICIENT TOOLS FOR DISSEMINATION AND FOLLOW-UP OF INFORMATION
CONTEXT	<p>Food security is the center of a global debate regarding the need to provide food for a growing population, estimated to reach 9 billion people in 2050. FAO estimates that in Mexico food losses and waste ranges between 30 and 45% and arises during the journey from harvest to the consumer, being one of the main deficiencies the product handling during the storage and transport processes¹.</p> <p>The reasons are varied and range from the lack of infrastructure and experience in postharvest handling, including lack of food chain traceability and coordination, to the scarcity of values referred to the ethics of not wasting food.</p> <p>In the context of the National Crusade Against Hunger, in 2013 SEDESOL joined the Technical Group for Food Losses and Waste, which aims to conduct technical studies and monitor Goal 4 of the program: “Minimize postharvest and food losses during storage, transport, distribution and marketing”.</p> <p>To accomplish this and other goals of the crusade, 5 in total, SEDESOL shall use resources of 70 already established federal programs. In the Administrative Agency 08 (Agriculture, Livestock, Rural Development, Fisheries and Food) 5 concurrent programs have been identified:</p> <ul style="list-style-type: none"> • Productive PROCAMPO • Prevention and Risk Management Program • Capacity Development, Technological Innovation and Rural Extensions Program • Program for Sustainability of Natural Resources • Agri-food Productivity and Competitiveness Program <p>¹ Statement issued by the Secretary of the Technical Group of Food Losses and Waste of the National Crusade Against Hunger, made in a press conference jointly to the United Nations Food and Agriculture Organization (FAO) in Mexico. Press note by SEDESOL on November 14, 2013</p>
ACTION OBJECTIVES	<p>This measure proposes to create an entity to facilitate waste monitoring during postharvest processes. This requires linking the technical work agenda of the National Agrologistics Program with the social work agenda of the National Crusade Against Hunger led by SEDESOL.</p> <ul style="list-style-type: none"> • Combine SEDESOL / SAGARPA's resources and measures • Establish a methodology to monitor the wastage of food in Mexico and analyze the main sources and its causes • Establish mechanisms to disseminate and implement good practices • Identify and propose the creation and/or modernization of agrologistics infrastructures needed • Connect the various links and encourage the participation of agents of agri-food chains in formal losses and waste reduction programs • Maximize the profits in postharvest production volumes
RESULTS	<ul style="list-style-type: none"> • Establish a measurement baseline regarding postharvest losses • Regular monitoring of any progress in reducing postharvest losses • Reviews and recommendations for the standardization of postharvest best practices • 10% reduction of postharvest losses and waste over a 4-year period in the internal market and 33% in the export chains.
DELIVERABLES	<ul style="list-style-type: none"> • Design of duties, functions, responsibilities and basic rules of the Commission's organization and operation • Develop scientific definitions methodology and alignments • Develop surveys for data collection and implementation • Losses and waste measurement schemes where it may be possible to measure directly • Analyses and recommendations • Implement mechanisms to disseminate survey results and recommendations
PILOT PROJECT	<p>Recommended the following pilot projects to address the recommendations of the study of postharvest losses:</p> <ul style="list-style-type: none"> • Cold storage for long periods to take advantage of new markets. • Development of new products to take advantage of the lower qualities, not accepted by supermarkets. • Follow-up to the wastage on food in specific chains to detect new procedures, regulatory requirements and/or information systems

WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
5B1. Establish the Commission's functions, responsibilities and reaches. Design of powers, functions, responsibilities and basic rules for the Commission's organization and operation. In addition to summon and appoint the Commission member institutions and its scientific committee.	•	•	•	•	•						
5B2. Development of methodology and alignment of scientific definitions with the CNCH and international organizations. Line the works and processes of the Commission with the protocols of the CNCH, FAO, WRI, etc., for the measurement of postharvest losses and their impact on the total volume of waste of food.		•	•	•	•	•					
5B3. Design and implement the first survey on postharvest losses at a federal level for the baseline.		•	•	•	•	•	•				
5B4. Analysis of the outcome of the survey and recommendations. Prepare the Commission's first report, to be submitted to the Congress together with the Technical Group for Food Losses and Waste led by SEDESOL.								•	•		
5B5. Implement dissemination mechanisms. Create a database and web platform to disseminate the survey's results and recommendations.						•					
5B6. Implement pilot projects.						•	•	•	•	•	

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / STATE	
The Inter-Ministerial Commission shall be led by SAGARPA.	National Agrologistics Council, Technical Group of Food Losses and Waste (SEDESOL), SIAP, INIFAP, PROFECO, representatives of the industry and civil society.	Consumers, producers, people experiencing lack of food, the society as a whole.	Head Office: SAGARPA, with operating extensions in the state delegations, which shall be the link between the Commission and the executing fields.	
			INDICATIVE BUDGET	
			The budget includes \$ MXN 25,750,000 the 1st year for establishing an inter-sector commission for the supervision of postharvest losses and waste and the design and application of a national survey and interpreting of the results. \$ 20 million MXN for the implementation of pilot projects and \$5 million MXN for annual operational expenditures starting in 2016. The budget accounts for an annual inflation rate of 4%.	
DATES			2015	\$ 25'750,000
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	2016	\$ 25'000,000
1 st quarter, 2015	1 st quarter, 2016	1 st quarter, 2017 Biannual Periodicity	2017	\$ 26'000,000
RESPONSIBLE UNIT			2018	\$ 27'040,000
SAGARPA			TOTAL	\$ 103'790,000

ACTION 5C	CREATE AN AGROLOGISTICS NETWORK OF EXCELLENCE FOR POSTGRADUATE STUDIES AND INNOVATION		
WORKING GUIDELINE	WG5. BUILDING OF HUMAN CAPITAL AND EFFICIENT TOOLS FOR DISSEMINATION AND FOLLOW-UP OF INFORMATION		
CONTEXT	<p>Implementing the vision of the National Agrologistics Program shall require innovativeness by all chain actors. This innovation consists in transforming the knowledge into concrete products and services, and it shall probably need incentives to trigger their application. The first step is to create a critical mass of researchers, and the implementation of a specialized Master in agrologistics will be an important progress in this direction.</p> <p>The Network of Excellence's mission shall be to provide a concrete framework for the innovation program, as well as to represent it legally and administratively, and to manage incentives for innovators. The basis of the program's content shall be provided by a 'think tank' that shall include research agendas regarding specific products in each key topics of the agrologistics chain¹.</p> <p>¹ These research protocols must be guided by demand and involve multidisciplinary groups including business studies, public administration, engineering, economics, sociology and other disciplines that lead to the creation, implementation, tracking and continuous improvement of the components of agrologistics systems.</p>		
ACTION OBJECTIVES	<ul style="list-style-type: none"> • Having a group of high-quality researchers in the field. • Create a collaborating space between knowledge and business areas in order to transform this knowledge in concrete products and services and to train agrologistics experts in the practice 		
RESULTS	<ul style="list-style-type: none"> • Create the Mexican Institute for Agrologistics • Patents, process reengineering, dynamic relationships between research centers, corporations and government • In addition, specializations, master's degree and joint doctorates are expected to be created among the participating universities, including foreign universities • Create a technological agenda that may lead to modernize the sector based on products and/or competitive advantages • Creation of services companies and skilled jobs • Create a network of postgraduates and specializations that address agrologistics, in the functions of teaching, research and extension, as soon as possible. • Include Agrologistics in CONACYT priority themes 		
DELIVERABLES	<table border="0"> <tr> <td style="vertical-align: top;"> <p>Design a postgraduates network of excellence</p> <p>Implementar Implement 2-3 teaching programs and 10 undergraduate specialization courses in 4 years, attracting 150 students between graduate and current studentscurso.</p> <ul style="list-style-type: none"> • Integrate the curriculum design group • Study of relevance • Construct a graduate student profile • Select and develop material and content • Establish materials of regional importance • Evaluation instrument development • Teacher recruitment • Integration of lab and equipment requirements • Define economic support for scholarship holders • Academic program registry </td><td style="vertical-align: top;"> <p>Mexican Institute for Agrologistics</p> <p>Elaboration of economic criteria and profitability of projects including technical criteria for the selection of applied research projects</p> <ul style="list-style-type: none"> • Select categories of products • Consult with producers to submit applied research projects • Consult with a limited group of consultants, higher education institutions, research centers, sector businesses and independent professionals • Create a B2B forum • Select complementing pairs (developer-project) • Delivery and evaluation results </td></tr> </table>	<p>Design a postgraduates network of excellence</p> <p>Implementar Implement 2-3 teaching programs and 10 undergraduate specialization courses in 4 years, attracting 150 students between graduate and current studentscurso.</p> <ul style="list-style-type: none"> • Integrate the curriculum design group • Study of relevance • Construct a graduate student profile • Select and develop material and content • Establish materials of regional importance • Evaluation instrument development • Teacher recruitment • Integration of lab and equipment requirements • Define economic support for scholarship holders • Academic program registry 	<p>Mexican Institute for Agrologistics</p> <p>Elaboration of economic criteria and profitability of projects including technical criteria for the selection of applied research projects</p> <ul style="list-style-type: none"> • Select categories of products • Consult with producers to submit applied research projects • Consult with a limited group of consultants, higher education institutions, research centers, sector businesses and independent professionals • Create a B2B forum • Select complementing pairs (developer-project) • Delivery and evaluation results
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WORK AGENDA - NATIONAL AGROLOGISTICS PROGRAM

WORK AGENDA	2015				2016				2017	2018
	I	II	III	IV	I	II	III	IV		
5C1. Working agreements to create the Agrologistics Network of Excellence. Establish medium and long term agreements with the National Council for Science and Technology (CONACYT), other researching agencies and centers (INCA, INIFAP), and leading private corporations in the industry.	•	•								
5C2. Definition of research thematic areas. Identify applied research areas, led by the private industry and sector, by means of the contributions made by network members in order to be developed by academic centers ² . ² The Engineering Institute at the UNAM, the Department of Economics of the Postgraduate College, the Rural Development Department at the University of Chapingo, the Financial Economics Department at the Faculty of Administration of the UNAM and the Center of Public Policy at the Technological Institute for Higher Education of Monterrey are examples of institutions, which can develop, applied research activities.	•	•	•	•						
5C3. Higher education in Agrologistics³. Create curriculum for degrees or engineering specializations (for example, for students of agricultural economics or industrial engineering) as well as a postgraduate degree, raising agrologistics to a university level. ³ There are no degree courses in agrologistics or to train customs operators. In Mexico City there is only a small private school that offers a Degree in Customs Practices (School of Customs Procedures). The most renowned degree is offered by the National Polytechnic Institute (IPN) in International Business.		•	•	•	•	•	•	•	•	•
5C4. Create the Mexican institute for Agrologistics. Create a center of agricultural knowledge innovation and generation based on applied research. The center shall have a B2B format and shall be advised by a think tank, whose mission shall be to define a technological agenda.			•	•	•	•	•	•	•	•
5C5. Align resources for research and development. Coordinate the allocation of resources of existing programs with other institutions and administrative departments to finance incentives for innovation programs.			•	•	•					

MEMBERS			SCOPE	
LED BY	PARTICIPANTS	BENEFICIARIES	FEDERAL / REGIONAL	
CONACYT, as it has the capability to link universities, researching centers and governments and the Mexican Institute for Agrologistics.	SAGARPA, public and private Centers of Excellences in research, CNA, SCT, IMT, ANTAD, leading companies of the sector.	Producers, trading corporations, as well as corporations that sell agricultural products directly to the final consumers. Society as a whole.	The network shall have several offices, strategically distributed throughout the country, consistent with the location of centers of knowledge, pilot projects and investments in logistics assets. The Mexican Institute for Agrologistics shall be in charge of CONACYT with close links with the sector through the National Agricultural Council (CNA).	
DATES			INDICATIVE BUDGET	
DESIGN PHASE	IMPLEMENTATION PHASE	EVALUATION	This budget includes \$30 million MXN for establishing a Forum on Innovation and Knowledge Generation and \$5 million MXN for the design of a study plan for the 1st year. \$8 million MXN annually in operation expenditures and \$4 million MXN in scholarships annually. The budget accounts for an annual inflation rate of 4%.	
1 st quarter, 2015	First quarter, 2016	2018	2015	\$ 47,000,000
			2016	\$ 12,480,000
			2017	\$ 12,979,200
			2018	\$ 13,498,368
RESPONSIBLE UNIT			TOTAL	\$ 85'957,568
Technical Agrologistics Secretary, CONACYT				

3.4 Coordination of the Program and operating mechanisms

In order to make this a reality the public policy programs require a decision-making structure and implementing agencies to bring them to practice. The National Agrologistics Program is not an exception. In this section the structures that will guide, coordinate and execute the Program are detailed, such as its operating mechanisms. The following points are detailed:

- The National Agrologistics Council: its formation process, mandate, members and work methods
- Opinions to consider to establish implementing agencies and guide them
- Necessary evaluation processes to maintain the pace of the program

3.4.1 The National Agrologistics Council: an effective structure to make decisions

Background

Within Agrologistics, key areas have been identified through 5 key Working Guidelines that will improve food security and help to establish inter-sector links, promoting the access to national and international markets. At the same time generating a positive impact not only in the creation of new sources of jobs, but also in the quality for jobs in Mexico's rural sector, and for all interested parts in the agri-food chain. The reach and character of these efforts require a focus on collaboration for its implementation. A substantial part of this, related to technology, finance and operations, should be necessarily a responsibility of the private sector. However, they should comply with two pre-conditions in order for the public-private associations to work efficiently.

The first precondition refers to well-coordinated public policy and the steps implemented in all the federal systems in their jurisdiction. Given the complexity of the institutional environment and the number of players involved, this work surpasses the order and ability of only one Secretary or office. The types of measures that are needed include for example infrastructure and basic services; roadway, sea transport, railway transport; food safety; health; ports, airports and borders; customs and problems related with the protocols of international trade, and national and international security.

The second precondition consists of facilitating the alignment within and between private sector players. This is a responsibility of group leaders of the private sector. However, the government can support this effort by sending a strong message to private sector operators with respect to the compromise in the consistency of policy, establishing equality of conditions and offering a

propitious framework for investing in the improvement of agrologistics. Once again we reiterate that there is not a single Ministry or Agency that can implement the necessary measures in relation to this wide spectrum of sectors.

A focus on steps

Due to the reasons mentioned before, a focus on two steps is proposed for the establishment of the National Agrologistics Council (See Figure 3.4)

1st step: Preparation of public-private dialog

This first step will last one year. It consists of the creation of the Specialized Cabinet by Executive Order, and the call of a Sectorial Working Table for the stakeholders by Presidential invitation.

The proposal of the Specialized Cabinet will ensure the alignment of the Ministries and government agencies in the actions and measures that should be taken together in order to implement the National Agrologistics Program effectively. The Specialized Cabinet will as a result give the cooperation agreements between the sectors and jurisdictions, which are necessary for the execution of the National Agrologistics Program. The members that participate in the Specialized Cabinet will be those who constitute the permanent members of the National Agrologistics Council.

The purpose of the Sectorial Working Table is to ensure that all key players of the agrologistics sector share a common understanding of the problems and challenges that need to be overcome and which are and should be its respective function and responsibility. The Working Table should involve the players of diverse areas such as transport, logistics services, wholesale markets, retail markets, producers, customs agents, banks, insurance companies, etc. The Sectorial Working Table will result in an agreement to establish the agenda for dialog, problem resolution and design of public policy with the government sector. The parties invited to join the Sectorial Working Table will be the future invited members of the National Agrologistics Council.

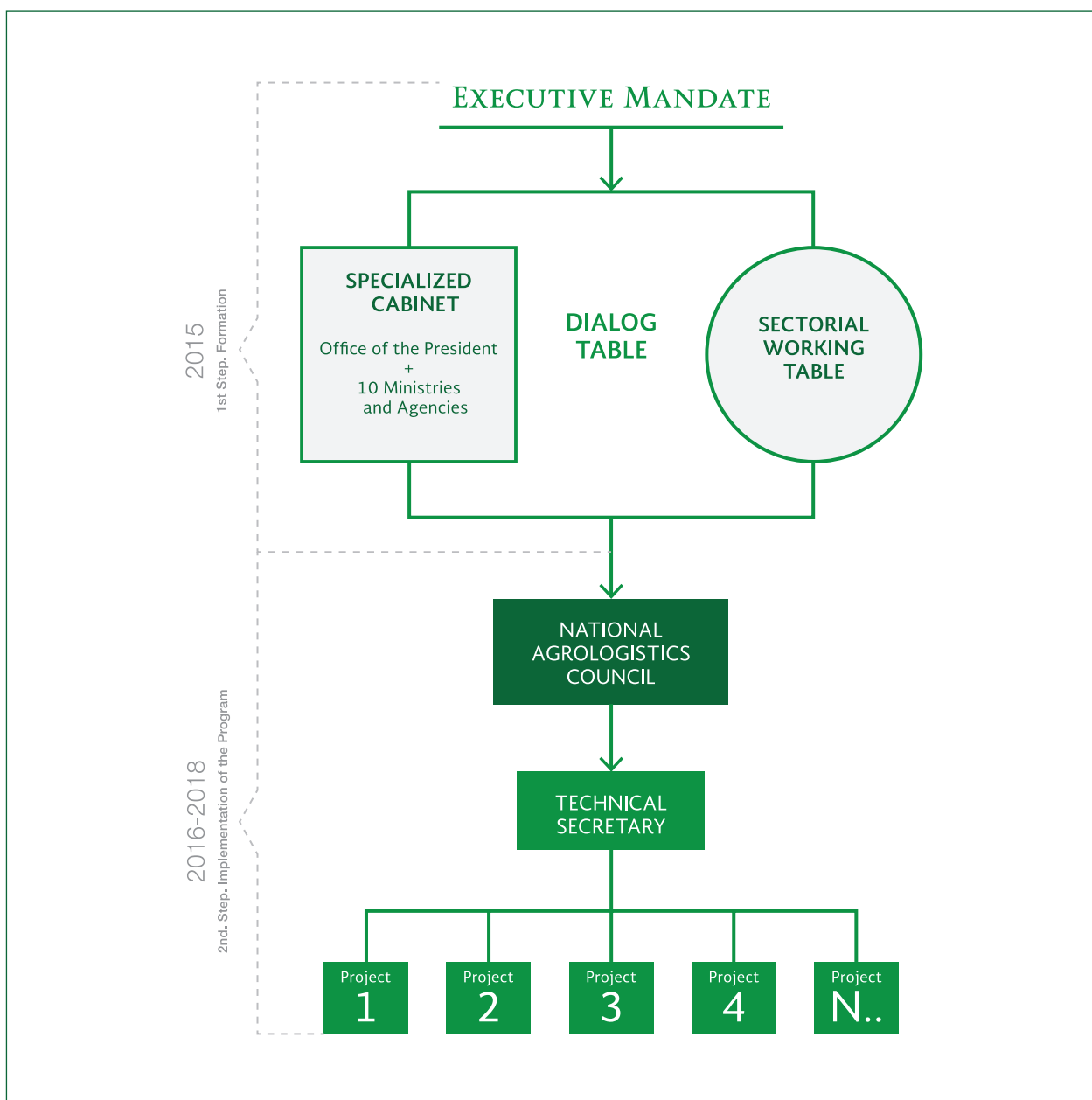
In order to bring these preparatory actions to life this report recommends the consideration of the naming of a "negotiator" or "facilitator" who should organize the first steps. This person should have an independent personality as a consulter or assessor and be well respected in the industry, in order to carry out the creation of dialog platforms between multiple interested parts, based on experience. As soon as the National Agrologistics Council is established, this "facilitator" can exit the process.

2nd step. Integration of the National Agrologistics Council

Both the Specialized Cabinet and the Sector Work Round Table will start working in November of 2014 and will have 12 months to be prepared. After 12 months the

members of both entities will start to work together as partners in the National Agrologistics Council with the Terms of Reference that are outlined in Annex 3.

Figure 3.4. Plan for the creation and structure of the National Agrologistics Council



3.4.2 Operation Mechanisms

Federal organizations play an essential role at the time of promoting and even boosting change. However, the implementing agencies are the ones that should deliver the resources, training, incentives where they are needed and communicate with the projects day to day and monitor progress. Therefore it is essential to raise an operation mechanism between the implementing agencies and the different levels of government.

Two options can be considered to administer the Program components:

- In the first scheme SAGARPA turns to federal entities, the states, to apply the resources through implementing agencies that depend on them
- In the second scheme, SAGARPA is supported by independent entities such as the Development Bank especially attuned to the implementation of the Program

It is necessary to indicate that these two plans are not exclusive and that in both cases the implementing agencies would report to the Technical Secretary, directly or through state Ministries. However, it is important to mention that this report recommends the exploration of option 2, going beyond the mechanics being used, since it is estimated that the implementation processes could be made more efficient with both the dedicated and

coordinated implementing agencies for a central body under the National Agrologistics Council. The following paragraphs offer a description of pros and cons of the two options.

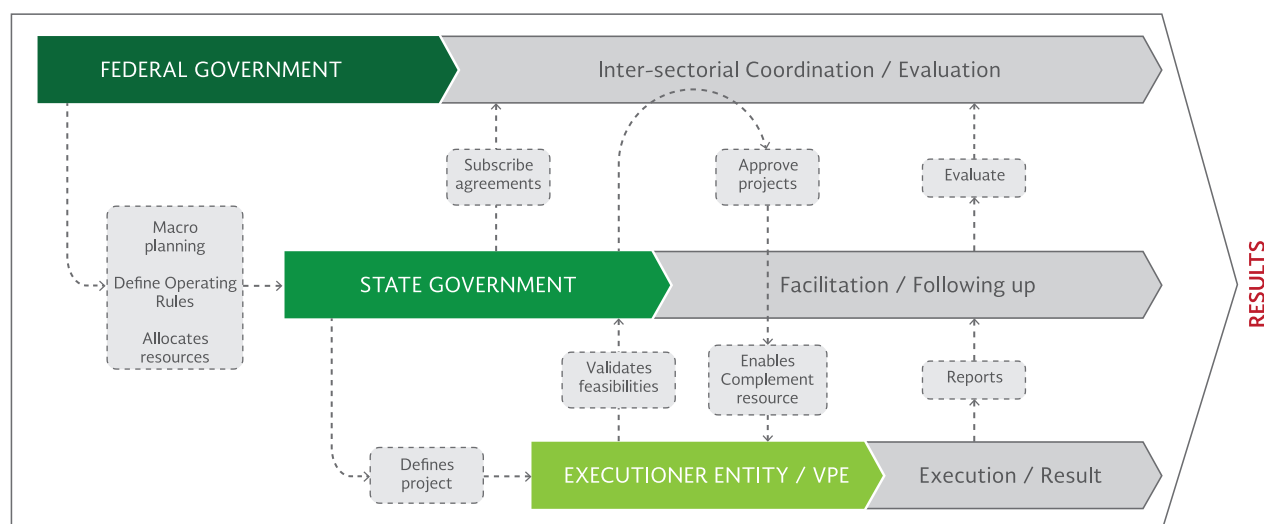
Option 1 – Federal and state level and implementing agencies

In this scheme the federal body (in this case, SAGARPA) assigns resources to state governments subject to operation laws and designs based on a macro plan (see Figure 3.5.). The state government defines the specific projects and validates the feasibility through the participation of the private sector in the projects gestation phase, like investors and co-developers.

The validated projects create the necessity of an agreement between the central / state government. Once the projects are approved on the federal level, the states direct the resources (in many occasions contribute up to 20%) and facilitate them to the implementing agencies.

These entities, vehicles or public-private associations hire the necessary services for the projects to be carried out and report to state governments, which in turn submit the project follow up to the assessment of the federal bodies (not always the same body where the resource originated).

Figure 3.5. Option 1 Operation mechanics through the state governments.



Option 2 - Federal and implementing agencies level

In this plan the federal government controls the resource through the Development Bank, which assigns the implementing bodies, in agreement with the prioritization of the National Agrologistics Council (See figure 3.6.).

In this case the initiative lies with the implementing agencies, which should define and present projects to the Technical Secretary for the evaluation of its feasibility.

Once validated, the projects are presented to the Council for approval. Those that are approved receive resources directly from the Development Bank through the implementing agencies.

The implementing agencies report to the Technical Secretary and at the same time to the Council. The Council coordinates with the state governments the progress of the projects. The necessity to report to the federal offices directly is eliminated since they are represented in the same Council.

Figure 3.6. Option 2 Operation mechanics of selection and management of projects through the National Agrologistics Council

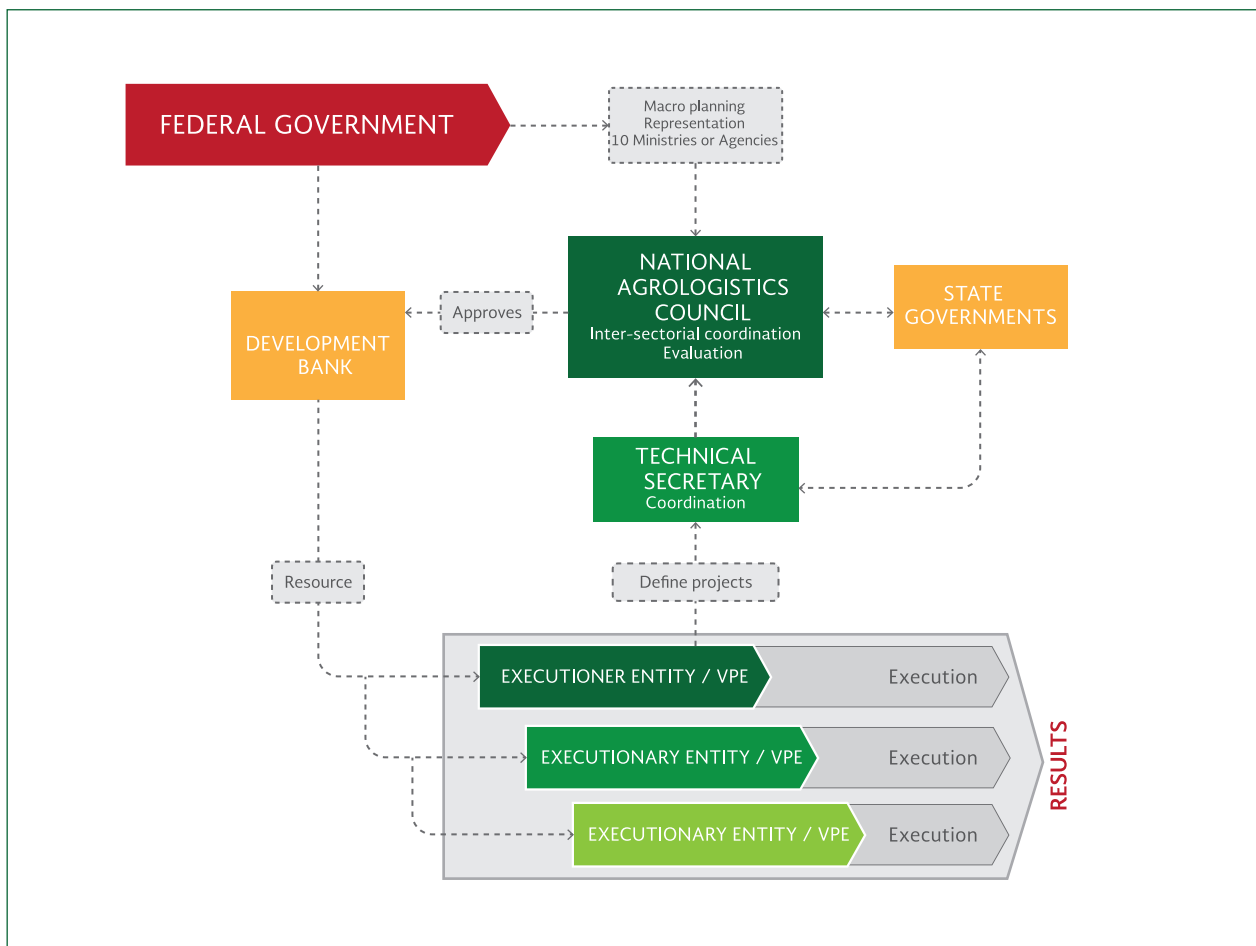


Figure 3.7. Pros and Cons of the operating mechanics presented.

	Pros	Cons
Option 1. Federal and State level and implementing agencies	<ul style="list-style-type: none"> • Requires less preparation time of mechanics • Utilizes existing mechanics and agreements between SAGARPA and the states • Control of SAGARPA is guaranteed by the approval of projects • An already known system 	<ul style="list-style-type: none"> • Depends on the availability of state resources, possible lack of staff and ability • SAGARPA has less control over the development objectives and the strategic decisions of projects • Multiple levels in accountability
Option 2. Federal level and implementing agencies	<ul style="list-style-type: none"> • Ability to manage more projects through the Council and Technical Secretary • Dedicated bodies, greater control over the development objectives and the strategic decisions of projects • Direct accountability to the Technical Secretary, greater efficiency in the execution of hired companies for specific functions 	<ul style="list-style-type: none"> • Requires greater preparation time of mechanics, depends on the establishment of the Council and the Technical Secretary and requires judicial and administrative design • Depends on the supply of implementing agencies with required capacity • The state governments have less control and should coordinate through the Technical Secretary

3.4.3 Evaluation Processes

In 2018 the arrival of an integral evaluation of the 15 measures is proposed. The evaluation report will be presented to the Congress, through the Specialized Cabinet and National Agrologistics Council, as evidence for the revision of the program and recommendations for its adjustment and continuation in the 2018-2024 period.

The integral evaluation of the 2014-2018 phase will consist of:

- Evaluation of the achievement of objectives by Working Guideline
- Evaluation of the utilization efficiency of resources (accounted for in budget)
- Evaluation of the efficiency of the legislative reforms and standards introduced
- Post evaluation of the impacts of the program. Cost-impact analysis of the executed actions

The following indicators are considered:

- Increase of agri-food exports
- Logistic performance of the chains, exporting in particular, in agreement with the 6 designated indicators by the LPI index
- Reduction of postharvest losses particularly in the supply chains of the domestic market
- Infrastructure capacity generated in the cold chain, measured in tons
- Public and private investment in agrologistics assets
- Creation of associations of producers for the supply of the chain
- Creation of jobs and social improvement in rural points
- Number of academic programs and students graduating from higher education programs with a specialization in agrologistics
- Public and private investment in research group and in specific projects

3.5 Budget

The estimated budget for Phase I of the National Agrologistics Program until the year 2018 is approximately \$5,000 million MXN. This includes public resources necessary for the completion of the 15 Actions outlined within this Roadmap. The resources are divided into five budget items, each one assigned to a Working Guideline. Table 3.8. illustrates the totals per budget item as well as its percentage of the total budget.

Table 3.8. Budget items of the National Agrologistics Program per Working Guideline until 2018.

Budget Summary 2015 – 2018						
Working Guideline	2015	2016	2017	2018	TOTAL	%
WG1	\$ 24,179,300	\$ 25,146,472	\$ 26,152,331	\$ 27,198,424	\$ 102,676,527	2%
WG2	\$ 147,850,000	\$ 190,278,000	\$ 133,536,000	\$ 138,877,440	\$ 610,541,440	13%
WG3	\$ 35,150,000	\$ 30,756,000	\$ 24,706,240	\$ 25,694,490	\$ 116,306,730	2%
WG4	\$ 654,750,000	\$ 703,128,000	\$ 764,253,120	\$ 831,082,445	\$ 2,953,213,566	61%
WG5	\$ 285,573,900	\$ 258,816,856	\$ 269,169,530	\$ 279,936,311	\$ 1,093,496,597	22%
Total per Year	\$ 1,147,503,200	\$ 1,208,125,328	\$ 1,217,817,221	\$ 1,302,789,110	\$ 4,876,234,860	100%
%	23%	25%	25%	27%	100%	

The concepts shall be detailed by the Working Guideline and then, in Table 3.9., the budget breakdown for each of the 15 Actions is shown.

WG1. An effective governance framework to discuss policies, development of technical solutions, and progress evaluations

The budget assigned to this Working Guideline for the 2015-2018 period is \$102,676,527 MXN and represents 2% of the total Roadmap budget.

2015	2016	2017	2018	TOTAL	% Pct.
\$ 24,179,300	\$ 25,146,472	\$ 26,152,331	\$ 27,198,424	\$ 102,676,527	2%

The main objective of the WG1 is the creation of effective Governance Framework for the agri-food sector with respect to logistics, which gives continuity to policies and alignment between stakeholders, as well as the creation of a Platform of National Consultation that allows taking informed decisions by all stakeholders. The actions of this Working Guideline will result in the creation and establishment of the National Agrologistics Council and the Technical Agrologistics Secretariat, as well as the creation of the Control Panel.

The main items of this Working Guideline according to the budget are as follows:

- National Agrologistics Council: preparation of reports, expenses for meetings and investigative duties, including the contributions of experts and special guests.

2015	2016	2017	2018	ACTION TOTAL
\$ 3,656,500	\$ 3,802,760	\$ 3,954,870	\$ 4,113,065	\$ 15,527,196

- Technical Secretariat: payroll, travel expenses and fixed office costs, operating expenses.

2015	2016	2017	2018	ACTION TOTAL
\$11,522,800	\$11,983,712	\$12,463,060.48	\$12,961,582.90	\$48,931,156.81

- Control Panel: design, implementation and operation. Diagnostic studies, data collection, development and evaluation of tools, expert participation.

2015	2016	2017	2018	ACTION TOTAL
\$9,000,000	\$9,360,000	\$9,734,400	\$10,123,776	\$38,218,176

WG2. Standardization of the chain based on quality

2015	2016	2017	2018	TOTAL	% Pct.
\$ 147,850,000	\$ 190,278,000	\$ 133,536,000	\$ 138,877,440	\$ 610,541,440	13%

This Working Guideline has an assigned budget of \$610,541,440 MXN, and represents 13% of the total Roadmap budget of the National Agrologistics Program.

Among the objectives of the WG2 are: facilitating of export trades through the establishment of joint inspections at a single point-a Single Window at Customs, Standardization of Packaging and Traceability, in line with international standards, and the creation of agreements of mutual recognition with America, Asia and Europe so that the certificates 50 agri-food products issued in Mexico could be recognized by the countries of these regions.

The expected outcomes of this Working Guideline are the creation of new health inspection regulations based on risk management, a system of pre-approval from authorized third parties at points of origin or consolidation, the establishment of a standard of traceability equivalent to international standards, new rules regarding the labeling and packaging for 50 priority products and the creation of a network of accredited laboratories for evaluating compliance.

The main items of this Working Guideline according to the budget are as follows:

- Creation of a pre-approval system at a single point, including the design of such pre-approval system, an annual pilot project and the establishment of a preferred line: annual system maintenance and the establishment of inspection facilities.

2015	2016	2017	2018	ACTION TOTAL
\$20,000,000	\$46,800,000	\$42,416,000	\$44,112,640	\$153,328,640

- The installation of a platform of standards adoption, harmonized label design, traceability and design pilot projects, and the construction and implementation of a returnable packaging system.

2015	2016	2017	2018	ACTION TOTAL
\$52,850,000	\$70,678,000	\$15,408,000	\$16,024,320	\$154,960,320

- Standardization of the Agri-food Value Chain, dissemination of the NOM ("Norma Oficial Mexicana" or Official Mexican Standard) seal, homologation of certification schemes, verification units network, studies and laboratory infrastructure equipment, as well as a system of standards evaluation.

2015	2016	2017	2018	ACTION TOTAL
\$75,000,000	\$72,800,000	\$75,712,000	\$78,740,480	\$302,252,480

WG3. Planning and construction of Agrologistics and multimodal assets in strategic locations

2015	2016	2017	2018	TOTAL	% Pct.
\$ 35,150,000	\$ 30,756,000	\$ 24,706,240	\$ 25,694,490	\$ 116,306,730	2%

This Working Guideline has an assigned budget of \$116,306,730 MXN for the 2015-2018 period, and represents 2% of the total 2018 Roadmap budget.

The main goal of this Working Guideline is to improve planning for the provision of infrastructure and multimodal and agrologistics assets across the country, and with a view to the long-term, design a Master Plan for the creation of an efficient agrologistics chain based

on an infrastructure of agrologistics assets as a result of public and private investment. The results obtained by the actions of this Working Guideline include the Comprehensive Master Plan, financing schemes to promote investment and the strengthening of agrologistics assets, and collaboration agreements with state governments.

The main items of this Working Guideline according to the budget are as follows.

- Development and Management of the Master Plan: development of tools for the planning, analysis and diagnosis of the current situation in its territorial and economic dimensions, as well as the proposal of areas of intervention and criteria for the selection of strategic projects. In the years following the 2015 design phase: management, continuous development and monitoring of planning, including terms of reference for the preparation of master plans governing regional and local action plans.

2015	2016	2017	2018	ACTION TOTAL
\$20,000,000	\$15,000,000	\$15,600,000	\$16,224,000	\$66,824,000

- Development of criteria studies, participation and incentive schemes, and the monitoring of pilot projects: definition of terms of reference, master and engineering plans which constitute key input for the achievement of such projects and their evaluation as investments.

2015	2016	2017	2018	ACTION TOTAL
\$10,000,000	\$10,400,000	\$3,536,000	\$3,677,440	\$27,613,440

- Consulting related to the development and implementation of framework agreements with state governments, and the creation of manuals: legal-administrative consulting and the monitoring of arrangements.

2015	2016	2017	2018	ACTION TOTAL
\$5,150,000	\$5,356,000	\$5,570,240	\$5,793,050	\$21,869,290

WG4. Promote a business model based on demand, beneficial and open to all parties

This Working Guideline has a budget of \$2,953,213,566 MXN for the 2015-2018 period, representing 61% of the total Roadmap.

2015	2016	2017	2018	TOTAL	% Pct.
\$ 654,750,000	\$ 703,128,000	\$ 764,253,120	\$ 831,082,445	\$ 2,953,213,566	61%

The main objective of the Working Guideline is to multiply investment resources, as well as to propose the development of strategic agrologistics assets, maximize the resources available to the agri-food industry, promote the organization of small producers to improve their market share and to establish transparent and auditable processes. The expected results of the actions of this Working Guideline are the multiplying of private

investment volumes, the reduction of logistics costs for greater and better logistic capacity, the creation of approximately 5,000 small associations which impact income levels, the training and development of new agri-businesses, as well as the promotion of transparency in the allocation of resources.

The items of this Working Guideline in accordance with the assigned budget are as follows.

- Contribution to the Agrologistics Fund: financing of agrologistics assets (enabling agroparks, cold storage, inspection stations, bonded warehouses, multimodal terminals), seed capital for testing new technologies by means of pilot projects (e.g. specialized cold chains), seed capital for the development of new services and logistics routes, and VPE/EPE projects as mechanisms of financial leverage and attracting resources from various sources.

2015	2016	2017	2018	ACTION TOTAL
\$500,000,000	\$550,000,000	\$605,000,000	\$665,500,000	\$2,320,500,000

- Training induction agents and incentives for the creation of producers associations within the E3 and E4 Strata, including support for market orientation towards demand and the business training of managers of associations.

2015	2016	2017	2018	ACTION TOTAL
\$144,450,000	\$148,128,000	\$154,053,120	\$160,174,444	\$606,805,564

- The establishment of auditable processes, operation of regional and state teams and monitoring: development of criteria for the granting of resources and the design of a tender system, as well as protocols for monitoring and evaluating projects.

2015	2016	2017	2018	ACTION TOTAL
\$10,300,000	\$5,000,000	\$5,200,000	\$5,408,000	\$25,908,000

WG5. Building of human capital and efficient tools for dissemination and follow-up of information

This Working Guideline has a budget for the 2015-2018 period of \$1,093,496,597 MXN, which represents 22% of the total Roadmap budget.

2015	2016	2017	2018	TOTAL	% Pct.
\$ 285,573,900	\$ 258,816,856	\$ 269,169,530	\$ 279,936,311	\$ 1,093,496,597	22%

The objective of this Working Guideline is to increase practical knowledge through extensionism towards producers capable of supplying the market, as well as to improve the monitoring of postharvest processing losses, and to create network of postgraduates and specializations who address agrologistics in the functions of teaching and research.

The expected results of this Working Guideline in 4 years

are: training of producers, reaching 25% of the target populations, as well as a 10% reduction in postharvest losses, recovering its economic value (2% of Agricultural GDP); the creation of a technological agenda together with the CONACYT; raising Agrologistics at a university level, and the creation of service companies with specialized jobs.

The main items for this Working Guideline are as follows:

- Providing courses: short 20-40 hour courses on agrologistics and postharvest handling in a network of extension; 88,677 people trained per year with a cost of \$2,400 per capita.

2015	2016	2017	2018	ACTION TOTAL
\$212,823,900	\$221,336,856	\$230,190,330	\$239,397,943	\$903,749,031

- Establishment of an Inter-sectorial Oversight Committee on postharvest losses, pilot projects and operation costs: first cycle implementation at the federal level of surveys, agrologistics performance evaluations, system agendas; design of the terms of reference for integrated reporting; visibility of system workings on issues of waste and food security. Pilot projects to address the recommendations of postharvest losses and waste studies as new schemes to implement uninterrupted cold chains, and alternative uses in the management of products (e.g. bio gas, processed products, livestock feed, compost, etc.)

2015	2016	2017	2018	ACTION TOTAL
\$25,750,000	\$25,000,000	\$26,000,000	\$27,040,000	\$103,790,000

- Creation of the Mexican Institute for Agrologistics and of the Innovation and Creation of Knowledge Forum: first year curriculum design; implementation of postgraduate and specialization programs in agrologistics during the following 3 years; availability of scholarships to 40 students per year. In terms of research and development: economic development criteria, project profitability, and technical criteria for the selection of applied research projects, as well as operating expenses.

2015	2016	2017	2018	ACTION TOTAL
\$47,000,000	\$12,480,000	\$12,979,200	\$13,498,368	\$85,957,568

Table 3.9. Budget items per Working Guideline and Action of the National Agrologistics Program until 2018.

National Agrologistics Program		2015	2016	2017	2018	TOTAL
Budget for 2015-2018		\$ 1,147,503,200	\$ 1,208,125,328	\$ 1,217,817,221	\$ 1,302,789,110	\$ 4,876,234,858
WG1	An effective governance framework to discuss policies, development of technical solutions, and progress evaluations	\$ 24,179,300	\$ 25,146,472	\$ 26,152,331	\$ 27,198,424	\$ 102,676,527
1A	Establish the National Agrologistics Council	\$ 3,656,500	\$ 3,802,760	\$ 3,954,870	\$ 4,113,065	\$ 15,527,196
1B	Establish a Technical Agrologistics Secretary	\$ 11,522,800	\$ 11,983,712	\$ 12,463,060	\$ 12,961,583	\$ 48,931,155
1C	Create a Control Panel to inform and evaluate	\$ 9,000,000	\$ 9,360,000	\$ 9,734,400	\$ 10,123,776	\$ 38,218,176
WG2	Standardization of the chain based on quality	\$ 147,850,000	\$ 190,278,000	\$ 133,536,000	\$ 138,877,440	\$ 610,541,440
2A	Create a pre-approval system at points of origin or consolidation of the chain based on risk management	\$ 20,000,000	\$ 46,800,000	\$ 42,416,000	\$ 44,112,640	\$ 153,328,640
2B	Standardize the quality of packaging and traceability systems	\$ 52,850,000	\$ 70,678,000	\$ 15,408,000	\$ 16,024,320	\$ 154,960,320
2C	Develop a standardization strategy	\$ 75,000,000	\$ 72,800,000	\$ 75,712,000	\$ 78,740,480	\$ 302,252,480
WG3	Planning and construction of Agrologistics and multimodal assets in strategic locations	\$ 35,150,000	\$ 30,756,000	\$ 24,706,240	\$ 25,694,490	\$ 116,306,730
3A	Prepare a comprehensive master plan, including project prioritization	\$ 20,000,000	\$ 15,000,000	\$ 15,600,000	\$ 16,224,000	\$ 66,824,000
3B	Develop the building design and development and management models for Agrologistics and multimodal assets	\$ 10,000,000	\$ 10,400,000	\$ 3,536,000	\$ 3,677,440	\$ 27,613,440
3C	Develop and implement framework agreements with state governments	\$ 5,150,000	\$ 5,356,000	\$ 5,570,240	\$ 5,793,050	\$ 21,869,290
WG4	Promote a business model based on demand, beneficial and open to all parties	\$ 654,750,000	\$ 703,128,000	\$ 764,253,120	\$ 831,082,445	\$ 2,953,213,565
4A	Multiply investment resources through special purpose entities and the Agrologistics Fund	\$ 500,000,000	\$ 550,000,000	\$ 605,000,000	\$ 665,500,000	\$ 2,320,500,000
4B	Encourage business models and association of small producers	\$ 144,450,000	\$ 148,128,000	\$ 154,053,120	\$ 160,174,445	\$ 606,805,565
4C	Establish auditable and transparent processes	\$ 10,300,000	\$ 5,000,000	\$ 5,200,000	\$ 5,408,000	\$ 25,908,000
WG5	Building of human capital and efficient tools for dissemination and follow-up of information	\$ 285,573,900	\$ 258,816,856	\$ 269,169,530	\$ 279,936,311	\$ 1,093,496,597
5A	Establish a modular training program based on Extensionism Networks	\$ 212,823,900	\$ 221,336,856	\$ 230,190,330	\$ 239,397,943	\$ 903,749,029
5B	Establish an inter-sectorial commission for supervising postharvest losses and waste	\$ 25,750,000	\$ 25,000,000	\$ 26,000,000	\$ 27,040,000	\$ 103,790,000
5C	Create an Agrologistics Network of Excellence for postgraduate studies and innovation	\$ 47,000,000	\$ 12,480,000	\$ 12,979,200	\$ 13,498,368	\$ 85,957,568

3.6 Calendar

Despite how far in the future the year 2030 may seem, achieving the objectives of the program, which involve a transformational legacy for the field in Mexico, needs to launch the Program soon as possible.

The schedule of actions until the year 2018 is extremely tight, and 2015 is the key to the success of the Program. If the operation can be performed in the last quarter of 2014, in 2015 not only will be able to lay the foundations of institutional coordination and executive capacity to scale up, but also these will be tested in pilot projects. These projects also will have the ability to generate confidence in the program, which will help producers and other actors to multiply and momentum initiated by the public sector.

The first recommended decisions are budget allocation for year 2015, which allows starting the Program without delay. If the budget is approved, SAGARPA should lead the following activities starting in 4th quarter of 2014, which involve the creation of Specialized Cabinet for Agrologistics and Sectorial Working Table as well as the establishment of a Technical Agrologistics Secretary dedicated to the coordination and monitoring of the Program.

Table 3.10. 2014-2018 Actions Schedule

National Agrologistics Program	2014	2015				2016				2017	2018
	IV	I	II	III	IV	I	II	III	IV		
WG1 An effective governance framework to discuss policies, development of technical solutions, and progress evaluations											
1A. Establish the National Agrologistics Council	1A									\$15'527,196	
1B. Establish a Technical Agrologistics Secretary	1B									\$48'931,155	
1C. Create a Control Panel to inform and evaluate	1C									\$38'218,176	
WG2 Standardization of the chain based on quality											
2A. Create a pre-approval system at points of origin or consolidation of the chain based on risk management	2A									\$153'328,640	
2B. Standardize the quality of packaging and traceability systems	2B									\$154'960,320	
2C. Develop a standardization strategy	2C									\$302'255,480	
WG3 Planning and construction of Agrologistics and multimodal assets in strategic locations											
3A. Prepare a comprehensive master plan, including project prioritization	3A									\$66'824,000	
3B. Develop the building design and development and management models for Agrologistics and multimodal assets	3B									\$27'613,440	
3C. Develop and implement framework agreements with state governments	3C									\$21'869,290	
WG4 Promote a business model based on demand, beneficial and open to all parties											
4A. Multiply investment resources through special purpose entities and the Agrologistics Fund	4A									\$2'320'500,000	
4B. Encourage business models and association of small producers	4B									\$606'805,565	
4C. Establish auditable and transparent processes	4C									\$25'908,000	
WG5 Building of human capital and efficient tools for dissemination and follow-up of information											
5A. Establish a modular training program based on Extensionism Networks	5A									\$903'749,029	
5B. Establish an inter-sectorial commission for supervising postharvest losses and waste	5B									\$103,790,000	
5C. Create an Agrologistics Network of Excellence for postgraduate studies and innovation	5C									\$85'957,568	

3.6.1 Schedule for Working Guideline 1

<div> <div>WG1</div> <div>An effective governance framework to discuss policies, development of technical solutions, and progress evaluations</div> </div>															
Action	Budget		2014	2015				2016				2017 / 2018			
	Start	End		I	II	III	IV	I	II	III	IV				
1A. Establish the National Agrologistics Council	\$15,527,196														
1A1. Project Preparation	01/10/14	30/09/15	●	●	●	●									
1A2. Establishment of the Council	01/10/14	30/09/15	●	●	●	●									
1A3. Institutional design of the Council	01/04/15	31/03/16			●	●	●	●							
1A4. Management Agenda	01/07/15	31/03/16				●	●	●							
1A5. Council continuity	01/01/16	31/12/18						●	●	●	●	●	●	●	●
1B. Establish a Technical Agrologistics Secretary	\$48,931,155														
1B1. Receive the necessary information inputs for the implementation of the Technical Agrologistics Secretary	01/10/14	30/06/15	●	●	●										
1B2. Establish the Technical Secretary	01/10/14	30/09/15	●	●	●	●									
1B3. Define the scope, roles and responsibilities of the Specialized Cabinet as well as the Technical Secretary	01/01/15	30/09/15		●	●	●									
1B4. Create and arrange the work agenda for the National Agrologistics Council	01/01/15	31/03/16		●	●	●	●	●							
1B5. Apply operating protocols. Generate permanent information and as well as initiatives	01/01/15	31/03/16		●	●	●	●	●							
1B6. Identify and manage the resources needed to operate the National Agrologistics Council, as well as its Committee and the Technical Secretary	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●
1C. Create a Control Panel to inform and evaluate	\$38,218,176														
1C1. Evaluation of the data and information sources	01/10/14	30/09/15	●	●	●	●									
1C2. Terms of Reference of the Control Panel	01/10/14	30/09/15	●	●	●	●									
1C3. Planning of the Control Panel	01/01/15	31/12/15		●	●	●	●								
1C4. Information management	01/01/15	31/12/15		●	●	●	●								
1C5. Supervision of the development of the Control Panel	01/01/15	31/12/15		●	●	●	●								
1C6. Training for decision-making	01/01/15	31/03/16				●	●	●							
1C7. Interfaces for evaluation for decision making	01/01/16	31/12/18						●	●	●	●	●	●	●	●
1C8. Dissemination and communication	01/01/17	31/12/18										●	●	●	●

3.6.2 Schedule for Working Guideline 2

WG2		Standardization of the chain based on quality														
Action	Budget		2014	2015				2016				2017 / 2018				
	Start	End		I	II	III	IV	I	II	III	IV					
2A. Create a pre-approval system at points of origin or consolidation of the chain based on risk management	\$153,328,640															
2A1. Subscribe cooperation agreements	01/10/14	31/03/15	●	●												
2A2. Design a pre-approval points system	01/10/14	31/03/16	●	●	●	●	●	●								
2A3. Legal and regulatory framework	01/01/15	31/12/15		●	●	●	●									
2A4. Implementation of the pilot projects	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●	
2A5. Operating mechanism for authorized third parties	01/01/16	30/12/16						●	●	●	●					
2A6. Single window	01/01/16	30/12/16						●	●	●	●					
2A7. Creation and certification of bonded warehouses	01/01/16	30/12/16						●	●	●	●					
2A8. Make electronic data exchange compatible	01/01/16	31/12/17						●	●	●	●	●	●			
2B. Standardize the quality of packaging and traceability systems	\$154,960,320															
2B1. Platform for Packaging Quality	01/01/15	31/12/18		●	●	●	●	●	●	●	●	●	●	●	●	
2B2. Adopt a smart labeling system that allows harmonized traceability with international standards	01/01/15	31/12/15		●	●	●	●									
2B3. Pilot projects on traceability for the domestic market	01/01/16	31/12/18						●	●	●	●	●	●	●	●	
2B4. Harmonize packaging standards with international markets	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●	
2B5. Design packaging standards for 10 perishable products	01/01/15	31/03/16		●	●	●	●	●								
2C. Develop a standardization strategy	\$302,252,480															
2C1. Create the Agrifood Standardization Work Team	01/01/15	30/06/15		●	●											
2C1.a Disseminate the NOM seal	01/04/15	31/12/18			●	●	●	●	●	●	●	●	●	●	●	
2C2.a A study of current law and regulatory baselines	01/01/15	31/12/15		●	●	●	●									
2C2.b Develop regulating standards, regulatory impact analysis and testing methods for 50 products	01/01/15	31/12/18		●	●	●	●	●	●	●	●	●	●	●	●	
2C2.c Homologation process for certification schemes	01/01/16	31/12/18						●	●	●	●	●	●	●	●	
2C3.a Domestic and international reciprocal acknowledgment of accredited Mexican laboratories to evaluate conformity	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●	
2C3.b Develop infrastructure and equipment in qualified laboratories, and provide training for its use	01/01/15	31/12/18		●	●	●	●	●	●	●	●	●	●	●	●	

3.6.3 Schedule for Working Guideline 3

<div> <div>WG3</div> <div>Planning and construction of Agrologistics and multimodal assets in strategic locations</div> </div>														
Action	Budget		2014	2015				2016				2017 / 2018		
	Start	End		I	II	III	IV	I	II	III	IV			
3A. Prepare a comprehensive master plan, including project prioritization	\$66,824,000													
3A1. Mandate to convene the stakeholders and request information	01/01/15	30/06/15		●	●									
3A2. Territorial diagnosis	01/01/15	30/09/15		●	●	●								
3A3. Links to other federal Programs: PNI and SNPL	01/04/15	31/03/16			●	●	●	●						
3A4. Economic diagnosis	01/10/15	30/09/16					●	●	●	●				
3A5. Design of the regulatory framework	01/01/15	30/06/16		●	●	●	●	●	●					
3A6. Prioritize the Agrologistics Fund as a result of territorial planning	01/01/16	30/12/18						●	●	●	●	●	●	●
3B. Develop the building design and development and management models for Agrologistics and multimodal assets	\$27,613,440													
3B1. Prioritize the allocation and exercise of financial resources from the Agrologistics Fund	01/01/15	31/12/15		●	●	●	●							
3B2. Define the Terms of Reference to hire studies and construction projects	01/01/15	31/03/16		●	●	●	●	●						
3B3. Procedure Manuals for public developers	01/07/15	30/06/16				●	●	●	●					
3B4. Participation scheme and incentives for anchor investors and key infrastructure operators	01/01/16	31/12/16						●	●	●	●			
3B5. Participation scheme and incentives for corporations and users	01/01/16	31/12/16						●	●	●	●			
3B6. Operation of the pilot projects and systematization of experiences	01/10/15	30/12/17					●	●	●	●	●	●	●	
3C. Develop and implement framework agreements with state governments	\$21,869,290													
3C1. Coordination with state governments	01/01/15	31/12/18		●	●	●	●	●	●	●	●	●	●	●
3C2. Review of current legal framework for implementing assets	01/01/15	30/06/16		●	●	●	●	●						
3C3. Required process needed by state governments to hire the asset constructive design	01/04/15	31/03/16			●	●	●	●						
3C4. Identify the origin of available programs and resources	01/04/15	31/12/15			●	●	●							
3C5. Creation operating manuals	01/01/16	31/12/16						●	●	●	●			
3C6. Technical support for project completion	01/01/16	31/12/18						●	●	●	●	●	●	●
3C7. System indicators	01/07/16	31/12/17								●	●	●	●	

3.6.4 Schedule for Working Guideline 4

WG4		Promote a business model based on demand, beneficial and open to all parties													
Action	Budget		2014	2015				2016				2017 / 2018			
	Start	End		I	II	III	IV	I	II	III	IV				
4A. Multiply investment resources through special purpose entities and the Agrologistics Fund	\$2,320,500,000														
4A1. Technical Secretary as the coordinating and monitoring body	01/01/15	30/06/15		●	●										
4A2. Creation and Operation of the Agrologistics Fund	01/01/15	31/12/18		●	●	●	●	●	●	●	●	●	●	●	●
4A3. Competencies of Special Purpose Entities	01/04/15	31/03/16			●	●	●								
4A4. Reforms to the Public and Private Associations Law	01/04/15	31/03/16			●	●	●	●							
4A5. Governance model for Special Purpose Entities	01/10/15	30/09/16					●	●	●	●					
4A6. Procedures to attract private investment	01/07/15	30/06/16				●	●	●	●						
4A7. Coordination of financing sources	01/07/15	31/12/15				●	●								
4B. Encourage business models and association of small producers	\$606,805,565														
4B1. Signing collaboration agreements	01/01/15	31/03/16		●	●	●	●	●							
4B2. Develop the business model	01/04/15	31/03/16			●	●	●	●							
4B3. Disseminate the Associativism proposed model	01/04/16	31/12/18							●	●	●	●	●	●	●
4B4. Define incentives for small producers and SMEs to use agrologistics assets	01/07/15	31/03/16				●	●	●							
4B5. Leading corporations assisting small producers	01/07/15	30/06/16				●	●	●	●						
4B6. Pilot projects	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●
4C. Establish auditable and transparent processes	\$25,908,000														
4C1. Mandates and commitments	01/01/15	31/12/15		●	●	●	●								
4C2. Establish criteria to grant financial assistance to agrologistics assets developers with public resources	01/07/15	31/12/15				●	●								
4C3. Bidding system for agrologistics assets	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●
4C4. Synchronize procedures	01/04/15	31/03/16			●	●	●	●							
4C5. Evaluation	01/01/17	31/12/18										●	●	●	●

3.6.5 Schedule for Working Guideline 5

<div> <div>WG5</div> <div>Building of human capital and efficient tools for dissemination and follow-up of information</div> </div>															
Action	Budget		2014	2015				2016				2017 / 2018			
	Start	End		I	II	III	IV	I	II	III	IV				
5A. Establish a modular training program based on Extensionism Networks	\$903,749,029														
5A1. Integrate the Academic Commission for Agrologistics Training	01/10/14	31/03/16	●	●	●	●	●	●							
5A2. Prepare a relevance study	01/01/15	31/12/15		●	●	●	●								
5A3. Train teachers and create contents	01/10/14	31/12/18	●	●	●	●	●	●	●	●	●	●	●	●	●
5A4. Establish workshops, online courses and promotion of instruction programs	01/10/15	31/12/18					●	●	●	●	●	●	●	●	●
5A5. Management and decisions for pilot test and evaluation	01/04/15	31/03/16			●	●	●	●							
5B. Establish an inter-sectorial commission for supervising postharvest losses and waste	\$103,790,000														
5B1. Establish the Commission's functions, responsibilities and reaches	01/10/14	31/12/15	●	●	●	●	●								
5B2. Development of methodology and alignment of scientific definitions with the CNCH and international organizations	01/01/15	31/03/16		●	●	●	●	●							
5B3. Design and implement the first survey on postharvest losses at a federal level for the baseline	01/01/15	30/06/16		●	●	●	●	●	●						
5B4. Analysis of the outcome of the survey and recommendations	10/07/16	31/12/16							●	●					
5B5. Implement dissemination mechanism	01/01/16	31/03/16						●							
5B6. Implement pilot project	01/01/16	31/03/17						●	●	●	●	●	●		
5C. Create an Agrologistics Network of Excellence for postgraduate studies and innovation	\$85,957,568														
5C1. Working agreements to create the Agrologistics Network of Excellence	01/01/15	30/06/15		●	●										
5C2. Define research thematic areas	01/01/15	31/12/15		●	●	●	●								
5C3. Higher Education in Agrologistics	01/04/15	31/12/18			●	●	●	●	●	●	●	●	●	●	●
5C4. Create the Mexican Institute for Agrologistics	01/07/15	31/12/18				●	●	●	●	●	●	●	●	●	●
5C5. Align resources for research and development	01/07/15	31/03/16				●	●	●							

4 Impacts of the Program

4.1 Expected Impacts

The proposed Working Guidelines include a series of actions that are interdependent in nature, and were proposed to generate synergies amongst themselves. Therefore, the impacts generated by each of these actions may not necessarily be measured in isolation. It is possible that more than one action shall contribute to the impacts of another, or that several actions are positively reinforced in their contributions to the program outcomes. Impacts generated by the project in general shall be considered, even when benefits to individual

lines are mentioned. Therefore it should be considered that the impacts would be generated by the project in general, even if the benefits that one line in particular contributes to are listed.

Considering this clarification, it is proposed to monetize as far as possible the quantifiable impacts of the actions of each working guideline, knowing that this involves a simplification with the limitation of isolating the contribution of an Action or Working Guideline.

4.1.1 Impacts of Working Guideline 1

In the Working Guideline 1, with the creation of the Agrologistics Council, the comprehensive planning of actions for the short-term, medium-term and long-term development is carried out. The interdepartmental definition of cooperation, which shall be carried out in this Council, is fundamental for the smooth running of projects and with it lays the agrologistics progress that has been proposed for Mexico. It is for this reason that the impact of this Working Guideline encompasses the benefits also obtained within the following Working Guidelines, which can be grouped into six categories:

1. Trade facilitation
2. Reduction of losses and waste along the chain
3. Multiplying effect on investments
4. Development of abilities
5. Reliability and safety
6. Better planning and coordination of infrastructure development

The examples of benefits from the sum of actions described in the National Agrologistics Program and those forged by the Council may be included. In this view, it may be deduced that direct investment in projects could generate an economic impact of \$11,800 million MXN and 9,000 new jobs¹³, plus cost reductions between 1% and 1.5% of total sales in the sector, by reducing insecurity through the joint action by government institutions¹⁴.

In addition, better planning and interdepartmental coordination shall be key so that the scheduled investments in the National Infrastructure Program in ports and key corridors for agrologistics take place, thereby increasing investment efficiency.

¹³ The direct investment in projects (this is, not considering the Budget allocated to the development of studies standards, etc.) is \$3,701,070,658 MXN. An economic spill was calculated applying a multiplier of 3.2 pesos per dollar invested and a multiplier for employment of 2.4 jobs per million invested. Data was taken from the Final Report for the Added Value Support Project 2012 (PROVAR) that serves cold chain, packaging and product handling. The document mentions that 311 projects with a \$750 million USD were supported, which triggered an investment of \$2,371 USD and 5,674 direct jobs were created, which means 2.4 jobs per million dollars of investment and a multiplier effect of 3.2 pesos in economic spill per dollar invested.

¹⁴ The Organization for Economic Co-operation and Development estimates additional insecurity-related logistics costs of from 15% to 20%; given that logistics represents from 10% to 12% of the cost of sales, the impact of uncertainty on said costs is between 1.5% and 2%. Therefore, a reduction in half a percent point in the cost of insecurity could save 1% to 1.5% in total sales. The estimation does not include current subsidies to lost funds, the possibility of granting zero rate loans and other alternatives to multiply even more the public resource.

Table 4.1. Impacts Summary Table of the National Agrologistics Program.

Impacts Summary Table of the National Agrologistics Program	
The benefits of the actions contained in the five Working Guidelines within the National Agrologistics Program may be categorized into six groups:	
1.	Foreign trade facilitation
<ul style="list-style-type: none"> • A 25% reduction in customs waiting times and a health inspection system based on risk management, resulting in lower logistics costs for exporters and importers. • Exports of the main 50 products could grow by up to 10%, amounting to \$29,600 million MXN. 	
2.	Reduction of losses and waste within the chain
<ul style="list-style-type: none"> • Reduction of postharvest food losses and waste equivalent to 4% of GDP: <ul style="list-style-type: none"> - A 33% reduction in losses and waste in the export chain, amounting \$11,168 million MXN. - A 10% reduction of losses and waste in the domestic market chains representing an amount that ranges from \$34,300 million MXN to \$58,200 million MXN. 	
3.	Multiplying effect of investments
<ul style="list-style-type: none"> • The economic spill generated by investment in the Program would amount to \$11,800 million MXN¹⁵ • An estimated creation of 9,000 new jobs. • Creation of conditions for receiving direct foreign investment. • Leveraging of one-to-one private investment, i.e. one private sector peso for each public sector peso in the construction of assets and investment in logistics services. 	
4.	Development of abilities
<ul style="list-style-type: none"> • Training and education of producers in agrologistics and business will reach 28,000 Rural Economic Units through the partnership program. • The investment of \$900 Million MXN in extensionism teaching to train 350,000 producers. • An investment of \$17 Million MXN in scholarships for postgraduate studies in Agrologistics. • The contribution of \$64 Million MXN in research and development by the Mexican Institute for Agrologistics. 	
5.	Reliability and safety
<ul style="list-style-type: none"> • The signing of mutual recognition agreements with countries in the Americas, Asia and Europe regarding 50 products, as a result of efforts to implement traceability systems and regulatory work; the opening of these markets cannot easily be calculated, but the potential for competitive Mexican products in these markets could reach billions of USD within the next 15 years. • Reduction in costs equal to 1%-1.5% of total sector sales by reducing insecurity through joint government action. 	
6.	Better planning and coordination of infrastructure development
<ul style="list-style-type: none"> • Increased cold storage and cold warehouse capacity. • More efficient use of investment in the National Infrastructure Program for improving roads, ports and multimodal transport (\$252,000 Million MXN) and the National System of Logistic Platforms (including 6 agroparks and food logistics centers). • Establishment of clear and transparent operation rules for addressing the resources of the private sector for investment in agrologistics assets. 	

Next, we present in disaggregated form, the specific impacts per Working Guideline.

¹⁵ The estimate does not include possible changes to the current subsidies, the possibility of granting loans at zero rate, and other alternatives to multiply even more public investments.

4.1.2 Impacts of Working Guideline 2

The results of Working Guideline 2, Standardization of the chain based on quality, are as follows:

The standardization and homologation of quality and safety standards for the selected 50 products, which can either be already exported products or those with a high potential demand, in line with the standards of Mexico's main trading partners, as well as the accreditation of laboratories for safety and health testing.

Another benefit of product standardization and traceability offered by this Working Guideline is the possibility of specifically requesting the characteristics of the products desired for purchase, and monitoring the dates of production or harvest. This would decrease losses related to expiration dates and a mismatch between what is requested and what is delivered. Because of these two effects, a 33% reduction in postharvest losses may be estimated, compared to the current estimate of 10% losses in the export chain, leaving an estimated reduction of 4% in losses and waste of this chain¹⁶. Considering a value of \$279,200 million MXN attributed to the products, there is a reduction of an additional \$11,168 million MXN due to this Working Guideline, which can improve the economic benefit of this industry by \$40,768 million MXN (see Table 4.2.).

The positive effects of the implementation of a traceability system can also be translated into improved confidence in the product, since being able to trace its origin and the checkpoints it passed on its way to the shelf, increases the need for producers to ensure product quality, resulting in a larger market for products with a larger added value. In summary, the benefits translate into higher profits for the companies implementing the use of traceability systems¹⁷.

A better risk-based system for customs inspections (reducing waiting times up to 25%) allows to simplify the export of products, reduce border inspections and open new markets (trade facilitation), which results in a further 10% increase in exports of the 50 selected products within the next 4 years. With this increase, it may be estimated that, with a current base of \$13,000 million USD, the volume of products exported by Mexican producers shall increase by \$29,600 million MXN (\$2,276 million USD).

Access to information on the chain should be the same for any participant.

Table 4.2. Estimated impacts per Working Guideline

MONETARY		NON-QUANTIFIABLE
Description	Amount	Description
WG2. Standardization of the chain based on quality		
Trade facilitation (10% increase in exports of the main 50 products)	\$29,600 million MXN in 2018	25% reduction in customs waiting times
Reduction of postharvest losses in the export chain equivalent to 4% of its value	\$11,168 million MXN in 2018	Access to chain information
WG2 subtotal	\$40,768 million MXN in 2018	

¹⁶ It is estimated that the average postharvest losses along the export chain equal 12% of the export value. This means a reduction in 33% in this area, resulting in the recovery of 4% of the chain's value. These impacts were calculated based upon food and livestock exports totaling \$11,300 million MXN in 2013, taking into account an inertial growth rate of 12%.

¹⁷ The report of the United States Department of Agriculture entitled Traceability in the U.S. Food Supply: Economic Theory and Industry Studies, raises the costs and benefits for three different chains in which there exists a low cost of implementing traceability systems, especially in perishable products. It also reviews the benefit that the use of this system generates, and, in general such benefits always outweigh costs.

4.1.3 Impacts of Working Guideline 3

In the Working Guideline 3, Planning and construction of agrologistics and multimodal assets in strategic locations, the results are as follows:

This Working Guideline considers the planning of activities through the creation of a master plan and the definition of strategic corridors used to guide investment in public and private infrastructure related to agrologistics.

With the planned investments reflected in the National Infrastructure Program (PNI) and the scheduled investments in Working Guideline 4, it is possible to increase management infrastructure of the cold chain in priority regions, as well as to further reduce losses and waste (shorter transport time and better management of them) happening in the domestic market. This results in a loss reduction by an additional 10% (resulting in 36% from a starting base of 40%) in order to reach a level of losses more suited to similar countries in the region. This reduction would mean an increase in sales of between \$31,600 million MXN (on the basis of sales) up to \$61,100 million MXN (estimated consumer prices), because such products are not wasted¹⁸ (see Table 4.3.)

It is noteworthy that the proposed target is at the end of 2018, and savings total a year's sales, estimated for the last year (2018); contribution may be higher as progress is made in achieving the goal of reduction within the early years.

With the estimated reduction, it is feasible to win substantial investments for improving the cold chain; this shows that such improvements may be profitable for producers and for the country, and may also have other non-quantifiable benefits such as increased food safety and availability.

Therefore, it is considered that proper planning as well as the right strategy for public and private investment is a very important requirement to best take advantage of a better way to maximize investments and not waste invested resources. A program such as the proposed is essential for maximizing benefits of investments, and is also a guide to investing in ports, developing multimodal terminals, agroparks as well as lowering transport costs and making local, Mexican and foreign agri-food chains more competitive.

Table 4.3. Estimated impacts per Working Guideline 3

MONETARY		NON-QUANTIFIABLE
Description	Amount	Description
WG 3. Planning and construction of Agrologistics and multimodal assets in strategic locations		
Better domestic market performance, reducing losses by 10%; a move from the current 40% to 36%	Between \$34,300 and \$58,200 million MXN	Food safety

¹⁸ According to the National Institute of Statistics and Geography (INEGI) through ENIGH 2013, household consumption of food, beverages and tobacco in 2012 amounted to \$1,096 million MXN, undergoing an annual growth of 5% (taken from the average annual growth rate for 2010-2013). A reduction of 10% of losses would result in a recovery of \$61,100 million MXN. The pace of recovery was calculated on the agricultural GDP, according to INEGI, and ascends to \$505,800 million MXN plus an 8.5% yearly growth. Postharvest losses within the food chains are estimated at 40% (according to the Declaration of the Ministry of the Technical Waste and Food Loss Group of the National Crusade Against Hunger, a joint press conference with the United Nations and the FAO, Mexico, 2013).

4.1.4 Impacts of Working Guideline 4

In the Working Guideline 4, Promote a business model based on demand, beneficial and open to all parties, the results are as follows:

The proposed Working Guideline considers investment funds and new business models that promote the integration and training of limited capacity producers through partnerships in order to improve their market share capabilities.

Through the actions of this Working Guideline, it is possible to incorporate new producers within the market who currently do not directly market their products, reducing their revenues and incentives for investing in improving the cold chain, and utilize better production methods.

Therefore, we believe that in reaching 28,000 Rural Economic Units (in the 2014–2018 period) out of the 900,000 capable of being supported, according to the FAO study¹⁹, it would be possible to increase the sales of these by \$2,400 million MXN²⁰ (see Table 4.4.).

The public investment estimated in \$7,000 million MXN in agrologistics assets through the National System of Agroparks and the Agrologistics Fund is another impact derived of this Working Guideline.

It is expected that this investment generates a one-to-one leverage with private capital destined for this type of investment. Therefore, one would expect that for every peso destined to investment in the mentioned concepts, one peso shall be invested by the private sector.

Table 4.4. Estimated impacts per Working Guideline 4

MONETARY		NON-QUANTIFIABLE
Description	Amount	Description
WG4. Promote a business model based on demand, beneficial and open to all parties		
28,000 Rural Economic Units under association programs. \$93,000 In 4 years per Rural Economic Unit (see footnote 29 in this report).	\$2,400 million MXN	\$7,000 million MXN in agrologistics chain assets (including the National System of Agroparks)

¹⁹ FAO, SAGARPA (2014): Diagnóstico del sector rural y pesquero de México 2012 (Diagnosis of the rural and fishing sectors of Mexico). The association schemes aim to bring together producers of the E3 and E4 strata to increase production capacity and its market power, in order to bring them to a level of competition equal to the producers of the E5 stratus. To that end, it will be necessary to create associations (with a target of 345 per year) until reaching 1,380 in 2018. The program will reach 28,000 Rural Economic Units (about 20 REU per association); with the change in incomes from E3 and E4 to E5 levels, this would mean an increase of \$2,400 million MXP in earnings; such implies that each REU can capture a potential equivalent of up to \$93,000 MXN in 4 years.

²⁰ This without considering exports likely to achieve having a greater number of players (considering only the domestic market).

4.1.5 Impacts of Working Guideline 5

The results for the Working Guideline 5, Building of human capital and efficient tools for dissemination and follow-up of information, are as follows:

The proposed actions are directed towards increasing information regarding Agrologistics. The implementation of a program of modular information based on the transfer of knowledge and technical education within a network of extensionism, as well as investment in postgraduate and specialist studies in Agrologistics, coupled with the monitoring and measuring of losses, shall have a positive impact on labor productivity along the chain, and shall reinforce their effects on losses and waste reduction.

With an investment of \$900 million MXN, 350,000 training courses in extensionism shall be created, as well as the creation of the Mexican Institute for Agrologistics, which will invest \$64 million MXN in research and development. An estimated \$17 million MXN in postgraduate scholarships will be given.

Other benefits which are not estimated within this summary but may be substantial as a result of the proposed improvements, may include:

- Access to new export markets (new products in existing markets or new markets)
- More efficient use of National Infrastructure Program investment
- Increased capacity of cold storage and cold warehouses
- Reduction in logistics costs, especially for lower transport costs
- Increased availability of logistics service providers
- Increase in available projects and financing for agrologistics infrastructure

Table 4.5. Estimated impacts per Working Guideline 5

MONETARY	NON-QUANTIFIABLE
Description	Description
WG5. Building of human capital and efficient tools for dissemination and follow-up of information	
350,000 training courses on extensionism with an investment of \$900 million MXN	Increase in labor productivity
Investment of \$64 million MXN in investigation and development through the Mexican Institute for Agrologistics	
\$17 million MXN for postgraduate scholarships for Agrologistics studies	

4.2 Conclusions of the Impact Study

As the result of the expected benefits and impacts of the Program, starting from a very high initial baseline (considering the value of agri-food products) and with detected inefficiencies, even a small improvement in indicators will generate great benefits for the country of between \$89 and \$113 thousand million MXN (see *Figure 4.1.*). Even if expected impacts are not reached, the investment of \$5 billion pesos and better coordination of spending with the SAGARPA and resources committed to the PNI (National Infrastructure Program), which does not necessarily mean more budget, is often surpassed by the expected benefits.

Given the synergies generated by each Working Guideline, the investment agenda should be treated as a whole, since the expected benefits would not be the same without, for example, better institutional coordination (Working Guideline 1) or without an agenda for research and training on agrologistics issues (Working Guideline 5).

Finally, as the only effort of its kind in Mexico, one of the expected benefits lies in the comprehensive and structured approach, involving all stakeholders participating in the agri-food chain: authorities, producers, traders, and retailers all working together to make the Mexican agriculture more efficient, productive and competitive.

Annexes

Annex 1: Validation Process for the Strategy Report

Validation	Organization	Date	Representative	Title
Feedback on the Strategy Report and validation of the Working Guidelines and Actions in the short- and medium-term	SAGARPA Undersecretary of Food and Competitiveness	July 23, 2014	Julio César Rodríguez Albarrán	Director General of Logistics and Supply
	SAGARPA General Coordination of Strategic Planning	July 24, 2014	Dr. René Villarreal	Chief of Staff of the Secretary Advisors
	SENASICA Directorate General for Inspections	July 7, 2014 (via e-mail)	Arturo Calderón Ruanova	Director General for Inspections
	SE Secretariat of the Economy, Director General of Standards	July 23, 2014	Alberto Esteban Marina	Director General of Standards
	SCT Ministry of Communications and Transportation	July 25, 2014	Iván Cajeme Villarreal	Advisor
	SEDATU Ministry of Agrarian, Territorial and Urban Development	July 24, 2014	Gustavo Cárdenas Monroy	Undersecretary of Land Management of the Ministry of Agrarian, Territorial and Urban Development
	BID Inter-American Development Bank	July 24, 2014	Amando Crotte Juan Carlos Villa	Coordinator of Infrastructure Projects for Mexico
	CNA National Agricultural Council	July 25, 2014	Luis Fernando Haro	Director General
	Office of the President	July 29, 2014	Arturo Martínez Lara	Director of Presidential Commitments

Annex 2: Scope of Review of the Land Use Legal Framework

#	Federal laws	Author
1	2014 ACD 000821 General Law for the Prevention and Management of Waste. New Law published in the Official Gazette of the Federation (DOF) on October 8, 2003: Current text. Last revision published within the DOF on April 6, 2014	Mexico. Ministry of Environment and Natural Resources
2	2014 ACD 000820 General Law of Ecological Equilibrium and Environmental Protection: New Law published in the Official Gazette of the Federation (DOF) on January 28, 1988. Current text. Latest revisions published in the DOF on January 16, 2014 [electronic resource]	Mexico. Ministry of Urban Development and Ecology
3	2014 ACD 000824 General Wildlife Act. New Law published in the Official Gazette of the Federation (DOF) on July 3, 2000. Current text. Last revision published in the DOF on March 19, 2014 [electronic resource]	Mexico. Ministry of Environment and Natural Resources
4	2014 ACD 000830 General Climate Change Act. New Law published within the Official Gazette of the Federation (DOF) on June 6, 2012. Current text. Latest revision published within the DOF on May 7, 2014 [electronic resource]	Mexico. Ministry of Environment and Natural Resources
5	2013 ACD 000823 General Sustainable Forest Development Act. Law published within the Official Gazette of the Federation (DOF) on December 7, 2001. Current text. Law revision published within the DOF on June 7, 2013 [electronic resource]	Mexico. Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food
6	2013 New General National Assets Law. New law published in the Official Gazette of the Federation (DOF) on May 20, 2004. Current text. Last revision published within the DOF on June 7, 2013	Mexico. Ministry of Public Administration
7	2013 ACD 000822 National Waters Act. New law published within the Official Gazette of the Federation (DOF) on December 1, 1992. Current text. Last revision published within the DOF on June 7, 2013 [electronic resource]	Mexico. Ministry of Agriculture and Hydraulic Resources
8	2013 DO 3075 Decree amending Federal Law on Environmental Liability is issued, amends, supplements and repeals various provisions of the General Law on Ecological Equilibrium and Environmental Protection, the General Wildlife Act, the General Law for the Prevention and Comprehensive Management of Waste, of the General Law for Sustainable Forest Development, the National Waters Act, the Federal Criminal Code, the Law of Navigation and Maritime Commerce and the General Law of National Assets [electronic resource]	Mexico. Ministry of Environment and Natural Resources
9	2010 DO 2491 General Law on Human Settlements [electronic resource]	Mexico. Ministry of Social Development
10	2010 Federal Rights Law [electronic resource]	Mexico. Ministry of Finance and Public Credit
11	2005 ACD 000825 Law on Biosafety of Genetically Modified Organisms. Current text. New law published in the Official Gazette of the Federation on March 18, 2005 [electronic resource]	Mexico. Ministry of Health
12	1997 KGF3421 L49 1997 General Law on Ecological Equilibrium and Environmental Protection/Environmental Crimes [electronic resource]	Mexico: Ministry of Environment, Natural Resources and Fishing
13	1988 KGF3421 L49 1988 General Law on Ecological Equilibrium and Environmental Protection [electronic resource]	Mexico. Ministry of Urban Development and Ecology

Annex 3: Terms of Reference for the Establishment of the National Agrologistics Council

A. Background

Mexico has the potential to develop a competitive, world-class agri-food industry. Agrologistics improvements have been identified in all regions of Mexico as key factors that will improve food safety and which shall help establish inter-sectorial links, providing access to domestic and international markets. This will generate not only a positive impact for the creation of new sources of employment, but also in the quality of employment within the rural Mexican sector as well as for all stakeholders in the food chain.

Although in recent years Mexico has made progress in its agrologistics performance, reports indicate that more effort is required to reach the levels achieved by competitors and most important trading partners. These efforts will be incorporated into the National Agrologistics Program.

The scope and nature of the efforts required result in a collaborative approach to their implementation. Much of the technology, finance and operations must necessarily be left to the private sector. However, in order for public-private partnerships to work effectively, two pre-conditions must be met.

The first relates to well-coordinated public policies and measures implemented within all federal systems and their jurisdictions. Given the complexity of the institutional landscape and the number of stakeholders involved, this task is beyond the mandate and capacity of a single Ministry or Agency. The type of measures that must be taken include, for example, infrastructure and basic services; road, sea and rail transport; food safety; health; harbor, airport and border crossings; customs and issues related to international trade protocols, and national and international security.

The second step is to facilitate alignment within and between private sector stakeholders. This is a responsibility of a group of private sector leaders. However, the government can support this effort by sending a strong message to private sector operators with respect to agreements of consistency and commitment in policies, establishing a level playing field of conditions and providing a propitious framework for carrying out investments in beneficial agrologistics improvements. Once again, it must be stressed that a single Ministry or Agency cannot provide assurance throughout this wide range of sectors.

B. A Step-by-Step Approach

Given the aforementioned reasons, a two-step approach is proposed for establishing the National Agrologistics Council.

First Step: This first step shall last one year. It is comprised of the Cabinet of Agrologistics Cabinet by as well as the convening of a Sectorial Working Table of stakeholders at the invitation of the President.

The purpose of the Cabinet of Agrologistics is to ensure that the Ministries and government agencies align in their actions and measures to be taken together to effectively implement the National Agrologistics Program. The Cabinet of Agrologistics will result in cooperation agreements between sectors and jurisdictions necessary for the implementation of the National Agrologistics Program. Participating members of the Cabinet of Agrologistics shall constitute the permanent members of the National Agrologistics Council (*See D [a] below*)

The purpose of this Sectorial Working Table is to ensure that all key players in agrologistics share a common understanding of the issues and challenges needing to be addressed, as well as what should be their respective roles and responsibilities. This involves stakeholders from different domains such as transport, wholesale and retail markets, producers, transport agencies, banks, insurance companies, etc. The Sectorial Working Table will result in an agreement for establishing topics for dialog, problem solving and the design of public policies with the governmental sector. Members invited to participate in the Sectorial Working Table will be future guest members of the National Agrologistics Council (*see D [b] below*).

Both the Cabinet of Agrologistics and the Sectorial Working Table shall start working in November 2014, and shall take 12 months to prepare. After 12 months have passed, members of both entities will begin to work together as members of the National Agrologistics Council under the following Terms of Reference.

C. Second Step and the Purpose of the National Agrologistics Council

The National Agrologistics Council encompasses the strategic planning and policy creation carried out for the National Agrologistics Program.

The specific objectives of the National Agrologistics Council are:

- To propose strategic leadership and ensure effective inter-sectorial and inter-jurisdictional cooperation in the development, implementation and evaluation of the National Agrologistics Program.
- To identify and carry out agreements on priority projects of the Public and Private Partnerships to be implemented as part of the National Agrologistics Program.
- To coordinate the actions, measures and budgetary allocations of the Ministries and federal agencies with the investments of the private sector.
- To supervise and evaluate progress in the implementation of the National Agrologistics Program through an annual report on the State of Agrologistics.
- To involve stakeholders in ongoing dialog and development of policies, and with it, to forge a strong and effective voice in international negotiations on standard, protocols and trade agreements relating to agricultural products

D. Coordinator, Chairpersonship and Membership

The National Agrologistics Council shall be convened and chaired by the President (Chairman). The President shall appoint a co-Chairman.

The National Agrologistics Council shall be comprised of two types of members, permanent members and guest members, with the latter representing major stakeholders.

a) **Permanent Members.** The permanent members of the National Agrologistics Council are:

- i. Office of the President
- ii. SAGARPA – as Technical Secretary
- iii. SENASICA - National Service of Agro Alimentary Health, Safety and Quality
- iv. SE- Ministry of Economy, Directorate General of Standards
- v. SHCP – Ministry of Finance and Public Credit
- vi. SAT – Tax Administration Services (Customs)
- vii. SEDENA - Ministry of National Defense

- viii. SCT - Ministry of Communications and Transportation
- ix. SEDATU - Ministry of Agrarian, Territorial and Urban Development
- x. SEGOB – Government Secretary (linked to the Legislature)
- xi. CJEF – Legal Council for the Federal Executive (Drafts the laws that the President submits to Congress)

All permanent members shall be designated by executive mandate and shall be represented at the highest level within biannual statutory meetings. All permanent members shall be represented on at least the directorial level during group and work meetings.

b) **Guest Members.** The guest members of the National Agrologistics Council include:

- i. National Agricultural, Rural, Forest and Fishing Development Financing
- ii. CNA – National Agricultural Council
- iii. CNC – National Peasant Confederation
- iv. CONAGO – National Conference of Governors
- v. CONACYT – National Council for Science and Technology
- vi. ANTAD – National Association of Supermarkets and Department Stores
- vii. ANTP – National Association of Private Transport Agents
- viii. ABM – Mexican Bankers Association
- ix. Port Authorities
- x. CONACCA – National Confederation of Supply Center Traders Aggrupation, A.C.
- xi. CAAAREM – Confederation of Associations of Customs Agents in the Mexican Republic
- xii. ANIERP – National Association of Importers and Exporters of the Mexican Republic
- xiii. AMF – Mexican Railroad Association
- xiv. AMANAC – Mexican Association of Shipping Agents
- xv. AAGEDE –General Warehouses Association

Guest members are invited to join specific working groups established by the permanent members. These working groups shall focus on priority actions of the Roadmap for the implementation of a National Agrologistics Program (see below for Methods of Work).

On occasions, the President of the National Agrologistics Council may convene special guests upon recommendation from a working group of the Technical Secretary.

E. Accountability

The National Agrologistics Council is convened by the President and shall report its actions to him. It is expected that individual members comply with a Code of Conduct and Procedural Rules, which shall be adopted within the first preparatory session of the National Agrologistics Council. Each Council member is fully responsible for representing the views of their electorate or jurisdiction and informing it of Council activities.

F. Methods of Work

- (a) **Evidence-based approach:** The development, implementation, supervision and evaluation of actions and measures resulting from the National Agrologistics Council must conform to the priorities of the Roadmap of the National Agrologistics Program. As far as possible, such actions shall be based on evidence of technical, economic and financial viability. For this reason, a dedicated Technical Secretary shall serve the National Agrologistics Council.
- (b) **Frequency of meetings:** The entire National Agrologistics Council shall hold at least two statutory meetings per year. The President must call special meetings. The Council's working groups shall meet as required during periods between sessions, and shall report to the full Council.
- (c) **Structure, duration and site of meetings:** Meetings shall take place over two days. The first day is for working groups to consolidate and coordinate their actions, measures and recommendations with the Technical Secretary. High-level decision making shall take place on the second day. Not all Council meetings shall take place in Mexico City. It is proposed that sessions must take place on a rotating basis between some of the five participating regions.
- (d) **Number of working groups:** The number of working groups must be determined by the President of the National Agrologistics Council, under the commendation of the Technical Secretary. In principle, the number of working groups shall not exceed four at any given time, and shall not exceed the appropriate²¹ level of capacity for assistance of any of the permanent members or guests.

G. Mandate and Revision

The initial mandate of the National Council of Agrologistics covers the period from October 2014 to May 2018. While, in principle, the Council has a permanent mandate, its specific Terms of Reference and scope of work shall be reviewed every three years after 2018 in order to ensure continuity of policy.

The Council must be formally established in 2015 and shall hold its first meeting during the fourth trimester of 2015.

H. Head Office of the Technical Secretary

The Council shall hold the head office of the Technical Secretary within the Office of the President and at SAGARPA.

²¹ This number may change depending on the necessity and availability of the representatives of the permanent and guest members invited to attend working groups at appropriate levels of seniority. This is important since the Code of Conduct and Procedural Rules of said Councils generally imply that the recommendations made by a working group are binding, which can be debated but not fully reversed. This means that the attending representatives within working groups should be able to make commitments.



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