This Country Note briefly summarizes information relevant to both climate change and agriculture in Argentina, with focus on policy developments (including action plans and programs) and institutional make-up.

**Note:** In the first bubble graph, the total emissions for Uruguay do not account for the positive effects of LUCF (i.e. afforestation efforts). If they are considered, agriculture represents 222% of total emissions. Because of afforestation efforts in Uruguay and Chile, land use change and forestry (LUCF) is not a net contributor to emissions; hence the countries do not appear in the second bubble graph, but are considered in the calculation of the average in the vertical axis.

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Summary
Argentina is one of the four developing countries in the world to have submitted two national communications to the United Nations Framework Convention on Climate Change (UNFCCC), indicating strong commitment by the government for addressing climate change issues across sectors. Agriculture (including land use change and forestry) is the largest contributor to GHG emissions in the country, while contributing less than 6% of GDP, and it represents 55% of the country’s export base (including processed agricultural goods). The emission reduction potential of the agricultural sector (including land use change and forestry) is significant and not yet sufficiently explored in the country. Argentina currently counts with only 1 CDM projects in the agricultural sector. Agriculture is highly vulnerable to climate variability. The extension and improvement of both irrigation infrastructure and climate-sensitive insurance coverage for agricultural production can reduce some of the observed vulnerabilities in the country.

Working definitions
Agriculture is defined as a managed system of crops, livestock, soil management, forest resources (productive use, goods & services) and water resources (irrigation), including land use and land use change. Climate change encompasses both mitigation and adaptation activities within the agricultural sector. On the mitigation side, the focus is on the potential to reduce greenhouse gas emissions by the different sub-sectors. On the adaptation side, the focus is on the potential to build resilience to climate and to increase the adaptive capacity through sustainable management of agriculture and other complementary factors (e.g., financial instruments). There is no specific time frame used in the country notes. An effort was made to collect the most recent available information on country indicators and policy matters.
The baseline map provides a visual characterization of Argentina’s agricultural potential given current environmental constraints and their regional distribution. Around 47% of Argentina’s land is used for agriculture (37% for pasture and 10% for cultivation), with forestry occupying 12% of the land in the country (WDI, 2005).

Baseline map: Current Major Environmental Constraints related to Agricultural Potential

1.1. Country Projections

Based on climate scenarios developed by national researchers for 2080/2090, the following climatic changes with relevance to the agricultural sector can be expected in Argentina:

a) **increases in temperature** – it is probable that the temperature will increase by 1°C in the whole country by 2020/2040, but particularly in the North, where agriculture is concentrated, leading to greater evaporation and subsequently to increased aridity and desertification.

b) **changes in precipitation** – precipitation increases are expected in the central part of Argentina, mainly during the summer and fall season, while a reduction in precipitation levels is projected for the Andes, Northeastern part of Patagonia and Comahue. Extreme precipitation events are expected to be more frequent.

c) **rising sea level** – it is probable that the average sea level will rise leading to coastal erosion, particularly in the Southern part of Patagonia.

Between 1999-2008 floods and storms have had the highest human and economic impact in Argentina, with losses averaging 0.23% of GDP – 678,040 people have been affected by floods (9 events) with the cost of the damages reaching US$ 2.1 billion and 5,000 people have been affected by storms (1 event) with damages reaching US$15 million. The damages of a drought event in June 2003 reached US$120 million.

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4 [http://unfccc.int/resource/docs/natc/argnc2s.pdf](http://unfccc.int/resource/docs/natc/argnc2s.pdf)
1.2. Agriculture-Related Impacts

It is expected that the projected temperature increase along with the higher occurrence of extreme events will have an impact on agriculture, particularly on crop yields. According to the study “Vulnerability of crop production in the Argentina Pampa region”, the increase in the CO₂ concentration would lead to an increased crop yield in wheat (14%), corn (19%) and soybeans (67%) in the South and yield losses in the North. The Northern and Northeastern parts of the country could suffer a desertification process due to increased evapotranspiration from increased temperatures and lack of precipitation, rendering the regions unsuitable for agriculture.

Argentina has submitted two National Communications to the United Nations Framework Convention on Climate Change (UNFCCC), laying out the actions that the government has already taken and the analytical basis for its policy response to climate change, as well as its commitments to take future actions within an official international framework. Most countries in Latin America have currently submitted only one National Communication, with the exception of Mexico (with 3) and Uruguay (with 2).

- The First National Communication (1997) established the National GHG Inventory for the year 1990 and 1994 and described the country’s vulnerability aspects to climate change.
- The Revision of the First National Communication submitted to the UNFCCC in 1999 included a new GHG Inventory for the year 1997.
- The Second National Communication (2007) updated the National GHG Inventory for the year 2000 (agriculture, livestock, land use change and forestry are included in this inventory) and included a revision of the 1990, 1994 and 1997 inventories, identified adaptation and mitigation measures to climate change as well as included vulnerability studies and potential climate scenarios.

The Climate Change Performance Index 2008 gives Argentina a fairly high rank – 10th among 56 countries responsible for more than 90 percent of global energy-related CO₂. Though the index does not explicitly incorporate the role of agriculture and land use change on emissions, it does recognize Argentina’s policy commitment to addressing climate change issues through one of the three indicators considered.

2.1. National Climate Change Plans, Strategies and Programs

The National Program for Climate Change Impacts was created with the purpose of developing a national strategy for the better understanding of Argentina’s vulnerability to climate change impacts and for the development of adaptation measures to climate change. Among its functions is the implementation of studies related to the global climate change impact on the various climates of Argentina, elaboration of national climate change adaptation measures, coordination of climate change actions with other related national programs such as the one for desertification prevention (PAN; see below).

The National Program for Civic Participation in the Climate Change Agenda and the National Program for Environmental Training and Education in Climate Change were developed by the Ministry of Environment and Sustainable Development (SAyDS, Spanish acronym) with the purpose of educating, distributing and sensitizing the public opinion to the issue of climate change by organizing workshops, conferences and seminars, as well discussions forums.

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8 http://unfccc.int/resource/docs/nate/natargnc2s.pdf
10 www.ambiente.gov.ar
The Action Plan 2006 for Climate Change Distribution and Training of Civil Society Organizations\textsuperscript{11} developed at the end of 2006 in three different stages and consisting of training workshops and seminars aimed at civil society organizations with the final aim of an increasing the promotion of projects related to global climate change.

The National Climate Scenarios Program created in 2005 with the objective to promote, coordinate and realize vulnerability studies of human and natural systems to climatic changes and their capacity to adapt to these changes as well as propose and execute climate change adaptation programs, among other functions.

2.2. Agricultural Sector Initiatives

The Ministry of Environment and Sustainable Development (SAyDS, Spanish acronym) oversees Argentina’s commitments to the UNFCCC and other climate change related actions, through its Climate Change Unit\textsuperscript{12} (UCC, Spanish acronym) which was created to implement climate change related activities of the Ministry.

3. The Institutional Context

3.1. Inter-Sectoral Coordination

The Argentine Office for the Clean Development Mechanism\textsuperscript{13} (OAMDL, Spanish acronym) is the Designated National Authority (DNA) on climate change and, in particular, on Clean Development Mechanism (CDM) in Argentina. It is responsible for evaluation and authorization of projects to be presented to CDM. The Executive Committee of the OAMDL, formed by officials from various ministries, is responsible for advising the Ministry of Environment and Sustainable Development in the formulation of policies related to climate change.

3.2. Agricultural Sector Institutions

The Ministry of Agriculture, Livestock, Fisheries and Food\textsuperscript{14} (SAGPyA, Spanish acronym), through its Office for Farm Risk\textsuperscript{15} (ORA, Spanish acronym) is responsible for specific actions and initiatives related to climate change aspects in agriculture, livestock, fisheries and forestry. It counts with agro-climatic risk maps which offer monthly information on the probability of occurrence of extreme events such as deficit or excess of precipitations, floods, frosts and extreme temperatures and their impacts on the yield of wheat, corn, soybeans and sunflower.

The National Weather Service\textsuperscript{16} (SMN, Spanish acronym), under the oversight of the Ministry of Defense, is responsible for generating, interpreting and distributing weather information through its various networks, among these the agro-climatic network.

The Climate and Water Institute\textsuperscript{17} (INTACyA, Spanish acronym) has projects related to the functioning of agro meteorological systems that offer support by generating weather forecasts for the farming sector, particularly about extreme events such as frosts, hailstorms, floods and high temperatures.

The Sea and Atmosphere Research Center\textsuperscript{18} (CIMA, Spanish acronym) is a research institute shared between National Research Council of Argentina (CONICET) and the University of Buenos Aires (UBA) and it performs research on simulation of extreme weather and climate events and their sensitivity to land use changes in the region.

\textsuperscript{11}http://www.ambiente.gov.ar/default.asp?IdArticulo=5328
\textsuperscript{12}http://www2.medioambiente.gov.ar/cambio_climatico/oamdl/organizacion.htm
\textsuperscript{13}http://www2.medioambiente.gov.ar/cambio_climatico/oamdl/organizacion.htm
\textsuperscript{14}www.sagpya.mecon.gov.ar
\textsuperscript{15}http://www.ora.gov.ar/
\textsuperscript{16}www.smn.gov.ar
\textsuperscript{17}http://www.intacya.org/
\textsuperscript{18}http://prono.cima.fcen.uba.ar/
The Forest Evaluation System Management Unit\(^{19}\) (UMSEF, Spanish acronym) under the Native Forest Division is in charge of monitoring native forests for detecting deforestation activities and forest fragmentation.

### 3.3. Fostering Capacity to Deal with Climate Change

**Emissions inventories:** Argentina has made 2 updates to its National GHG Inventory \((\text{INVGEI} 2000)\)\(^{20}\) covering the years 1990, 1994, 1997 and 2000. The Inventory includes information on emissions from agriculture, livestock, land use and land use change, forestry and waste, providing disaggregated information by type of emission and type of agricultural resource.

**Studies related to climate change and agriculture:** The Torcuato di Tella Foundation realized the Project for climate scenario development and vulnerability studies for SAyDS to complement the Second National Communication vulnerability studies, which identified an increased vulnerability of water resources in the Rio Plata basin as well as in the oasis of the Cuyo piedmont by using future climate scenarios for the period 2030/2040. **Fundación Bariloche\(^{21}\) has conducted work in the field of climate change, though with greater emphasis on energy issues rather than agriculture. **AIACC\(^{22}\) has completed two studies related to the agricultural sector, focusing on climate change impacts and vulnerability assessment in Argentina (among other countries in the region): “Building capacity to assess the impact of climate change/variability and develop adaptive responses for the mixed crop/livestock production systems in the Argentinean and Uruguayan Pampas (LA27)”\(^{23}\) and “Integrated Assessment of Social Vulnerability and Adaptation to Climate Variability and Change Among Farmers in Mexico and Argentina (LA29)”\(^{24}\). A regional study, financed by START-AIACC and USAID, was finalized in 2006 by the national research organizations of Argentina, Brazil and Uruguay: “Development and implementation of a system for impact assessment of the variability of weather and climate change in the agricultural production systems of Argentina, Brazil and Uruguay, and the identification of potential adaptive responses”.

The World Bank published a flagship document for the entire region of Latin America and the Caribbean titled “Low carbon, High Growth: Latin American Responses to Climate Change”\(^{25}\), encompassing information on climate change impacts in the region, on the potential contribution to mitigation efforts as well as a listing of future low carbon-high growth policies.

### 4. The Impact of Agriculture on Climate Change - Mitigation Measures

Agriculture alone contributes 35% to GHG emissions in Argentina, with land-use change and forestry accounting for 16%. According to the Second National Communication, agriculture is responsible for 69.7% of the total methane emissions for 2000, mainly from enteric fermentation from farm animals, and for 96.8% of the total nitrous oxide emissions, mainly from use of farm land.\(^{26}\) The nitrogen based fertilizers used in agriculture appear to have contributed little to nitrous oxide emissions; however their contribution has increased almost five-fold, from 2.7% in 1990 to 11% in 2000. Argentina’s emissions in 2004 stand at 3.7tCO\(_2\)/capita (representing 0.5% of global emissions, unchanged since 1990), compared to the Latin America region of 2.6tCO\(_2\)/capita and the world at 4.5tCO\(_2\)/capita\(^{27}\).

#### 4.1. Action Frameworks

##### 4.1.1. Forestry and Land Use Change

The average annual net deforestation rate for Argentina for the period 1990-2005 is 0.4% (WDI, 2005), an improvement from 2002 when the rate was 0.8% (WDI, 2005). Nevertheless, actual
rates for the ensuing years may be even higher due to the rapid expansion of the agricultural frontier in the Chaco ecosystem. While actual estimates of forest degradation are not available, it is thought to be extensive due to forest fires, forest grazing by livestock and unsustainable rates of extraction. Most of Argentina’s forests (76%) and most forest loss (75%) are in the Dry Chaco forests, due to massive industrial-scale clearing for the cultivation of soy, cotton and other crops. Deforestation is also high in the Yungas forests. Deforestation in these areas is often accompanied by social tensions.

Forest plantations for commercial purposes sequester on average 10t/hectare annually. Tree plantations are located mainly in the provinces of Misiones, Corrientes, Entre Ríos, Buenos Aires and Santa Fe, with much smaller areas being located in the provinces of Neuquén, Río Negro, Chubut and Salta/Jujuy. The provinces of Corrientes and Misiones represent about 85% of the recent expansion in plantation forests. According to the National GHG Inventory, the annual GHG absorption in CO2 equivalent units from land-use change and forestry for 2000 exceeded the GHG emissions, leading to a net absorption of 43,940 Gg in CO2 equivalent units. The net CO2 absorption for the year 2000 from the land-use change and forestry sector represented a third of the total CO2 emissions from the energy sector.

The Second National Communication identifies a scenario whereby a forestation activity of 1.7 million hectares would take place in the following 15 years, in addition to the present 1 million hectares, mostly in the Patagonia, Buenos Aires and Mesopotamia region. This would lead to an annual carbon sequestration of 11.5 Mt/year.

Argentina completed its First National Native Forest Inventory covering the forest areas of the six regions. The inventory was done in two phases, the last one being completed in 2006.

The Program for Production of Improved Propagation Material (PPMPM, Spanish acronym) initiated in 1997 and financed by the Forest Development Program represents the national strategy for genetic material improvement of commercial forests. The main objective of this program is to obtain a seed production of better quality than the existing ones for the most important species.

In October 2008, Argentina was selected into the World Bank’s Forest Carbon Partnership Facility (FCPF). The FCPF aims to assist Argentina in its efforts to reduce emissions from deforestation and forest degradation (REDD). The Facility has the dual objective of building capacity for REDD, and testing a program of performance-based incentive payments in some pilot countries, on a relatively small scale, in order to set the stage for a much larger system of positive incentives and financing flows in the future. As a first step, Argentina will participate in the so-called Readiness Mechanism of the FCPF. This mechanism supports Argentina to arrive at a reliable estimate of its national forest carbon stocks and sources of forest emissions. In addition, Argentina will define its reference scenario based on past emission rates for future emissions estimates. More details regarding Argentina’s next steps under the Readiness Mechanism of the FCPF can be found in Argentina’s Readiness Plan Idea Note (R-PIN).

4.1.2. Livestock

Of the total methane (CH₄) emissions for the year 2000, more than 95% were generated from enteric fermentation from farm animals, the rest being from handling of animal manure. These emissions differ by animal type as well. Of the total CH₄ emissions, non-milk bovine account for
88.8% of total CH₄ emissions generated from enteric fermentation and 82% of CH₄ emissions generated from handling of farm manure. Regarding N₂O emissions, more than 66% of these resulted from manure from grazing animals. As in the case of CH₄, bovine are the most responsible for N₂O emissions, with 81.8% of total.

As a result of an experimental study of bovine grazing on fertilized pasture versus naturally grown one, whereby the amount of CH₄ emitted was reduced by 10% for the latter (from 177g CH₄/day to 160g CH₄/day), the following mitigation measures have been identified in the Second National Communication with the final aim of reducing CH₄ emissions generated from livestock: i) improvement of pastureland, thereby increasing productivity; ii) implementation of adequate animal sanitation procedures; iii) improvement of animal diet and ensuring gestation.

4.2. Carbon Trading and Agriculture
Under the Clean Development Mechanism (CDM), developed (also referred to as Annex I) countries can implement project activities that reduce emissions in developing (non-Annex I) countries. Almost a third (29.23%) of all registered CDM projects are in Latin America (LAC). Though the CDM is expected to generate investment in developing countries, especially from the private sector, and promote the transfer of environmentally-friendly technologies in that direction, the global share of agricultural sector projects (including afforestation and reforestation) is very small (5.71% of total registered projects globally as of December 2009) and the potential is country-specific. Latin America, as a region, currently holds the largest share of registered agricultural projects globally, 61% (75 projects).

As of December 2009, there are only 16 registered projects in Argentina, representing a very small share of projects (4%) in LAC. Currently, there are 2 registered CDM projects in agriculture in Argentina (on the reduction of methane emissions from livestock), with no projects registered under the “afforestation and reforestation” category. This is a shortcoming given the impact of the sector on GHG emissions in the country.

The Argentine Carbon Fund (FAC, Spanish acronym) counts with a portfolio of more than 70 projects in various sectors, agriculture accounting for 4% of them. The majority of these are concentrated in the Cuyo (28%) and Humid Pampa region (29%).

The World Bank has mobilized a fund to demonstrate projects that sequester or conserve carbon in forest and agro-ecosystems. The BioCarbon Fund, a public/private initiative administered by the World Bank, aims to deliver cost-effective emission reductions, while promoting biodiversity conservation and poverty alleviation. In principle, the BioCarbon Fund can consider purchasing carbon from a variety of land use and forestry projects; its current portfolio includes Afforestation and Reforestation, Reducing Emissions from Deforestation and Degradation and the Fund is currently exploring innovative approaches to account for agricultural soil carbon.

5. Impact of Climate Change on Agriculture - Adaptation Measures
Argentina has prepared a number of climate change vulnerability studies in anticipation of the preparation of the Second National Communication: i) vulnerability of the Patagonia and the South Pampa region as well as Buenos Aires to climate change; ii) vulnerability of the coastal region of the La Plata river; iii) vulnerability of agricultural production in the Pampa region; iv) vulnerability of water resources in the coast of Mesopotamia and v) vulnerability of the Bonaerense Pampa. Some adaptive measures such as irrigation, adjusting planting dates, spatial

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33 http://unfccc.int/resource/docs/natc/argnc2s.pdf
34 http://unfccc.int/resource/docs/natc/argnc2s.pdf
35 http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByScopePieChart.html
36 http://cdm.unfccc.int/Projects/projsearch.html
37 http://www.ambiente.gov.ar/?idseccion=111
38 http://unfccc.int/resource/docs/natc/argnc2s.pdf
distribution of risk through geographically separated plots, changing crops and maintaining a livestock herd were identified as common measures in the Cordoba region to cope with climatic hazards.

5.1. Action Frameworks

5.1.1. Land Management
The Second National Communication identifies the following adaptation measures: i) replacement of winter crops with summer ones, such as substitution of cotton and wheat with soybeans or corn; ii) revising the control and fining system in areas where intentional pasture fires are frequent, particularly during the dry winter season which is more conducive to forest and pasture fires; iii) introduction of new crop varieties and crops adapted to the new climate conditions; iv) adaptation of seed banks to future climate conditions through the production of seeds adapted to future probable scenarios and to the occurrence of possible new diseases and pests and v) additional irrigation due to evaporation caused by future probable temperature increase and no change in precipitation regime.

Additionally, the study titled “Vulnerability of farm production in the Argentine Pampa region” identifies the following adaptation measures: i) conditional land renting system consisting of a reduction of the rent price for farmland by extending the contracts to more than two or three harvest seasons; ii) promoting the “transformation of origin” by leaving part of the production in the place of origin in order to be used by the local industry or for animal fodder, thus reducing the price of transportation to the ports; iii) changes of sowing dates: it is predicted that in the future it is convenient to realize early sowing of wheat and corn or delay harvesting of soybeans due to future predicted extended frost periods and iv) additional irrigation due to increased water necessities, especially in the Northern and Central part of the country.

Furthermore, the country counts with a National Action Program for the Fight against Desertification coordinated by SAyDS whose main objective is to fight against desertification and to mitigate the effects of draughts at the local and national level.

5.1.2. Water Use
Of the total arable land available in the country, only 5% is irrigated. The irrigation system, representing 75% of the water extraction in the country, has a low efficiency of less than 40%. Traditional inefficient irrigation systems still predominate over modern ones. Their inefficiency is reflected in the fact that, of the 1.5 million hectares under irrigation in the country, a third presents soil salinity or drainage problems. Out of the total area equipped for irrigation, 74.3% is done with surface water and 25.7% with groundwater.

The Second National Communication identifies as an adaptation measure the need to better quantify the availability and quality of groundwater in the region in order to provide additional irrigation for crops and pastures in case of draughts, as well as to better regulate it. Another measure would be to replace old irrigation systems with more efficient pressurized irrigation ones (sprinkler system), as well as to expand the land under irrigation. Furthermore, the reduced water availability in the summer will call for an expansion of the reservoirs so that the winter and early spring water can be transferred for use to the summer season, thus offering a cushion for the yearly water variability.

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40 http://www.ambiente.gov.ar/?idarticulo=244
One of the components of the National Water Resources Plan (PNRH, Spanish acronym) which is currently being prepared is the introduction of improved water management measures in order to avert the negative impacts of extreme weather events and improved irrigation efficiency, with particular impact on agriculture.

5.2. Social Aspects and Interventions

While social and human development indicators have improved substantially since the crisis of 2002, poverty and inequality in Argentina still remain at levels comparable to those in the 1990s43. There are marked inequalities among the different regions in Argentina with the highest rates of rural poverty (about 50% of the population) being registered in the Northeast and Northwest region. It has been estimated that around 15% if the extreme poor in Argentina live in rural areas and nearly 40% of rural households live in extreme poverty compared to just over 30% of urban households. Livelihoods in the rural areas consist mainly of: on-farm agricultural activities (about 15% of rural residents), off-farm agricultural and non-agricultural complemented by subsidies and remittances (about 21% of the rural population) or a combination of the two (about 64%).

- **Autonomous Adaptation Strategies**

  A survey conducted in the South of Cordoba province, where climate risk includes exposure to drought and flooding, shows that some of the most common farmer adaptation strategies were: accumulating commodities as an economic reserve (85% of surveyed farmers); maintaining a livestock herd (70%); spatially distributing risk through geographically separated plots (52%); adjusting planting dates (36%) and changing crops (12%). Only 1% of farmers chose irrigation as a risk-coping strategy to draught given the cost of such a project44.

- **Social Programs**

  Some of the measures taken by the government to help the rural population overcome poverty by diversifying their agricultural and off-farm income are the implementation of two projects that provide financial and technical support to farmers’ to improve their productivity and links to markets: Project for the Northeastern Provinces (PRODERNEA)45 and the Northwestern Rural Development Project (PRODERNOA)46. Argentina also counts with a conditional cash-transfer program, Heads of Household47 (Programa Jefes de Hogar), implemented by the Ministry of Labor and Social Security. The objective of this program is to reinsert parents into the labor market and beneficiaries are also required to attend training activities. The second evaluation of this program in 2004 determined that the program mainly covers the rural area (40% coverage in Chaco, Formosa and Jujuy, largely rural); however it had little success in terms of people acquiring employment48. The Plan for Social Inclusion of Families, implemented by the Ministry of Social Development, provides monetary and non-monetary assistance to beneficiaries and reaches out to 22 provinces, expanding its coverage from 240,000 to 500,000 families between 2004 and 200749.

5.3. Insurance Instruments

Most of agricultural insurance policies offered in Argentina are for hail coverage, but there is also a minority of multi-peril policies. These don’t only include climate risks, but also potential losses due to plant disease and fire, among others. According to the Census survey on insurance

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44 Wehbe; Eakin; Seiler; Vinocur; Avila; Marutto. 2006. Local Perspectives on Adaptation to Climate Change: Lessons from Mexico and Argentina. AIACC Working Paper No. 39
49 http://www.desarrollosocial.gov.ar/Planes/PF/default.asp
in the agriculture and forestry sector of 2005-2006 and a recent World Bank survey on the state of agriculture insurance worldwide, Argentina counts with 29 private agricultural insurance companies, covering a volume of US$ 240 million representing 2% of total insurance premiums in the country. Of the total cultivated area in the country, 52% of it is insured (15,000,000 hectares). The multi-peril risks covered for agriculture are hail, theft, fire and plant life and the crops insured are oilseeds, cereals, tobacco, citrus, forages, olives, vid and vegetables.

There are three main instruments (programs) in place that support the agriculture sector in managing climate risks. All of these instruments require public sector, be it federal or provincial, budgetary resources to operate:

a) **Office for Agricultural Risk** (ORA, Spanish acronym): this is a unit within the Ministry of Economy that provides key information and analysis on risks affecting the agriculture sector of Argentina. Some of the recent activities being undertaken by this unit is the development of an information system for evaluating agriculture risks, such as climate, market prices, economic forecasts, and animal plant and health risks. ORA also provides information about the agriculture insurance market and undertakes risks analysis on various specific issues. It also provides technical assistance to Provincial Governments that subsidize or have public programs for coverage of agriculture risks.

b) **Premium subsidies**: some provincial governments of Argentina have implemented programs for covering small farmers against catastrophic climate risks, such as the Government of Mendoza purchasing coverage of hail insurance for wine, fruit and olive producers. Very recently, the Government of Chaco is evaluating the subsidy of a program to cover drought and excess rainfall risks to small cotton producers.

c) **PRODERNEA**: this is a program currently in execution that provides coverage at the national level to small farmers of vegetables under greenhouses.

The following government entities and donors are involved in initiatives relating to climate risk management for agriculture in Argentina:

a) **Public sector**:
   i. **SAGPYA**: is part of the Ministry of Economy and is host to the ORA
   ii. **Superintendence of National Insurances** (SSN, Spanish acronym): provides oversight of the insurance sector and has been a key body for the discussions on allowing new instruments in the market, such as index-based insurance products.
   iii. **Provincial governments**: some of the subsidy programs for small farmers have been funded and driven by provincial governments.

b) **Donors**:
   i. The World Bank: has provided technical assistance to the Government of Argentina on index-based new agricultural insurance instruments.
   ii. The Inter-American Development Bank: has financed some of ORA’s work on information systems

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51 [www.ora.gov.ar](http://www.ora.gov.ar)
52 [www.sagpya.gov.ar](http://www.sagpya.gov.ar)
About Country Notes on Climate Change Aspects in Agriculture...

The Country Notes are a series of country briefs on climate change and agriculture for 19 countries in Latin America and the Caribbean region, with focus on policy developments (action plans and programs), institutional make-up, specific adaptation and mitigation strategies, as well as social aspects and insurance mechanisms to address risk in the sector. The Country Notes provide a snapshot of key vulnerability indicators and establish a baseline of knowledge on climate change and agriculture in each country. The Country Notes are the beginning of a process of information gathering on climate change and agriculture. The Country Notes are “live” documents and are periodically updated.

Feedback
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