



Annex 2: Template for submission

The Regional Institution/UN Agency	
Name	Food and Agriculture Organization of the United Nations (FAO)
Address	Headquarters, Viale Delle Terme Di Caracalla, 00153, Rome, Italy
Number of staff	Approximately 3500 regular programme staff + project staff
Annual budget	Approximately USD 1,000 million regular budget funds
Summary of the Support for Adaptation in Developing Countries	
Basic information	
Title of project, programme or portfolio	FAO-Adapt: Framework Programme on Climate Change Adaptation.
Objective(s)	<p>Agriculture, forestry and fisheries are the sectors most vulnerable to climate change. They are also crucial economic sectors in the most vulnerable countries, particularly LDCs. Adaptation within these sectors is therefore essential to ensure food security and also, through landscape, coastal and ecosystem management, plays a crucial role in broader adaptation goals. A holistic approach is therefore required which is tailored to the needs of countries. This is why FAO designed FAO-Adapt.</p> <p>The Committee on World Food Security (CFS), which gathers governments, along with concerned stakeholder, private sector and civil society discussed the issue of climate change and food security. Informed by a report of its High Level Panel of Experts on Food Security and Nutrition (HLPE), the CFS recommended that FAO implement FAO-Adapt.</p> <p>FAO-Adapt is an organization-wide framework programme which brings together multi-disciplinary expertise from different FAO technical departments and decentralized offices as well as collaboration with external partners. The objective is to increase the ability of FAO to respond to the needs of FAO member countries by providing a flexible support mechanism that can be tailored to specific national and local requirements. FAO-Adapt focuses on key elements of reducing vulnerability and increasing the capacity to address the impacts of climate change.</p> <p>Support is in 3 main stages depending on countries requests and needs:</p> <ol style="list-style-type: none"> 1. Advisory role to member countries through FAO's Normative Programme. 2. Support in the formulation of programmes and initiatives and identification of potential funding avenues. 3. Technical support for the implementation of programme and initiatives. <p>The above (especially point 3) is undertaken in partnership with relevant organizations, including UN agencies, research institutions, financing bodies and regional and local entities.</p> <p>In addition, FAO-Adapt aims to create a knowledgebase on the key adaptation options and catalytic actions suitable for different country contexts and enhance the coordination, capacity development and sharing of experiences on adaption among its member countries to widen the coverage, encourage synergies, enhance cross-sectoral approaches.</p>
Countries and/or regions supported	Any of FAO's over 190 member countries can request support through the FAO-Adapt programme. Response will depend on country requirements

	<p>and resource availability (financial and human). Priority is given to developing country needs, and particularly to the most vulnerable LDCs.</p> <p>Initiatives and programmes are already underway in different regions (especially in Africa, Asia and the Pacific) and countries, including: Algeria, Angola, Argentina, Bangladesh, Benin, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, China, Columbia, Côte d'Ivoire, Cuba, Ethiopia, Ghana, India, Indonesia, Iran, Iraq, Ivory Coast, Jordan, Kenya, Lao P.D.R., Lebanon, Lesotho, Madagascar, Malaysia, Malawi, Mali, Mauritania, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Myanmar, Niger, Nigeria, Oman, Pakistan, Palestine, Phillipines, Qatar, Senegal, Syria, Sudan, Tanzania Thailand, Tunisia, Vietnam, Uganda, Uruguay, Zambia and Zimbabwe.</p>
Sectors addressed	<p>FAO-Adapt is intended to address the core climate change adaptation needs of developing countries which are mainly within the agriculture (including crops, livestock and grassland areas), forestry, fisheries and aquaculture sectors, although assistance is also provided to the wider rural development context.</p> <p>Support is provided through 5 main “ themes” which have been identified as priority areas of support required by member states:</p> <ol style="list-style-type: none"> 1. Data and knowledge for impact and vulnerability assessments and adaptation. 2. Institutions, policy and financing to strengthen capacities for adaptation. 3. Sustainable and climate-smart management of land, water and genetic resources. This includes the conservation and improvement of seeds, crops, breeds and fish stocks as well as issues such as land and water management practices to improve soil fertility, reduce salinity and conserve water resources. 4. Technologies, practices and processes for climate proofing and adaptation. 5. Disaster risk management.
Timing and duration	<p><i>FAO-Adapt was initially conceived in 2011 and is intended as an ongoing support mechanisms which FAO provides to its member states, so timing and duration does not apply to the overall programme but to the specific regional, country and local initiatives being implemented.</i></p>
Contact person (name, email address and telephone number)	<p>Xiangjun Yao, Director of Climate, Energy and Tenure Division (NRC), Xiangjun.Yao@fao.org, or NRC-Director@fao.org, +39 06 57055096</p>
<p>Scope of support (Please provide a description for each relevant category of support)</p>	
Planning, prioritizing and implementing adaptation actions identified in national/subnational plans and strategies, national communications, NAPAs etc.	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>FAO-Adapt provides stakeholders with tools, methodologies, data and guidance to identify adaptation priorities and develop the required policy and institutional framework required for implementation. Priority is to efficiently integrate interventions into existing programmes and frameworks ensuring cross cutting issues are linked, that synergies are captured and tradeoffs reduced. In particular, FAO promotes the integration of adaptation priorities outlined in the NAPAs into agriculture, forestry, fisheries sectorial policies, plans, programmes and local actions.</p> <p>An example of FAO-Adapt work has been the development of fisheries, aquaculture and climate change and ocean acidification strategy¹ which identifies climate change implications and supports sector specific actions. In addition, a Global Partnership on Fisheries, Aquaculture and Climate Change (PaCFA)² has been created to help prioritize and support coordinated responses. Adaptation and implementation efforts within the</p>

¹ www.fao.org/docrep/017/am434e/am434e00.htm

² www.climatefish.org/

	<p>sector are being developed based on NAPAs , national communications as well as guidance received from a series of regional and national workshops (including workshops in African, APFIC region³, Bangladesh, Benguela Current⁴, Caribbean, Lake Chad Basin⁵, Latin America⁶, Malawi, Near East/North Africa⁷, Pacific SIDS⁸ and Vietnam).</p> <p>The Commission on Genetic Resources for Food and Agriculture is also developing technical material and guidelines to integrate genetic-diversity considerations into climate change adaptation planning (see Annex for more details). FAO is also supporting the development and adoption of national strategies for conservation and use of plant genetic resources for food and agriculture, including identification of climate change related traits and improving access of genetic resources (especially seeds) to farmers. In addition work is underway to identify high yielding crop germplasm (with a focus on major cereals) to contain traits of improved resource use efficiency (water and nitrogen) and adaptation to high temperatures (increased minima and maxima).</p>
<p>Impact and vulnerability assessments <i>(including of financial needs)</i></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>FAO-Adapt support for instance includes:</p> <ol style="list-style-type: none"> 1. Guidelines, methodologies and tools for collection, processing and analysis of climate change-related data and information, and strengthening databases for use in impact and vulnerability assessments and adaptation. For example using the approach of <u>S</u>elf-evaluation and <u>H</u>olistic <u>A</u>ssessment and climate <u>R</u>esilience of farmers and <u>P</u>astoralists (SHARP). 2. Strengthen capacities of national and regional entities to undertake impact and vulnerability assessments and participatory adaptation planning through the provision of training, decision tools and policy advice. 3. Communicate information and promote equitable access of rural people and institutions to information related to impacts of climate variability and change and adaptation in the agriculture, forestry and fisheries sectors from global to local levels, and vice versa through appropriate channels. 4. Document, evaluate and disseminate successful experiences in sustainable natural resources management, agriculture and food production and gender and rights-based adaptation strategies and practices. 5. Through the Commission on Genetic Resources for Food and Agriculture, conduct sectoral studies on climate change and genetic resources for food and agriculture (see Background Study Papers: www.fao.org/nr/cgrfa/climatechange), for 2014 work is also planned on the identification of hotspots of biodiversity for food and agriculture under particular threat from climate change (see Annex 1). 6. Expert consultations, research efforts, modelling and assessments to ascertain the vulnerabilities of specific fisheries and aquaculture systems

³ www.apfic.org/modules/smartsection/item.php?itemid=357

⁴ www.fao.org/docrep/017/i3053e/i3053e.pdf

⁵ www.fao.org/docrep/017/i3037e/i3037e.pdf

⁶ www.fao.org/docrep/018/i3356s/i3356s.pdf

⁷ www.fao.org/docrep/014/i2146e/i2146e.pdf

⁸ www.fao.org/docrep/017/i3159e/i3159e.pdf

	<p>to climate change. For example, supporting community or fishery-based level assessments, such as the vulnerability of coral-reef dependent fisheries communities in Kenya⁹ and the multi-scaled assessment of fisheries in the Benguela Current.</p> <p>7. Enhance the capacity of member states to prevent the adverse effects of climate change and variability on water and soil salinization. Restore salt affected soils or adapt systems to bring land back into agricultural production.</p>
<p>Strengthening institutional capacities (<i>of national institutions</i>) and creating enabling environments</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <ol style="list-style-type: none"> 1. FAO-Adapt advocates within international and regional forum, for a stronger recognition of the challenges to and potential of agriculture, forestry and fisheries sectors in climate change adaptation frameworks and financing mechanisms, and ensure that the main stakeholders, including indigenous people and vulnerable groups, have a voice in advocacy. 2. Support is provided in integrating climate change adaptation into national and sub-national agriculture, forestry and fisheries sector policies and plans, land use and water policies, food security programmes, legal frameworks and investment priorities, and ensure appropriate representation of the sectors in climate change and disaster risk management policies and strategies. 3. Support the strengthening of institutional capacities among sector line agencies, education, research, extension and communication for development services. 4. Enhance national capacities of countries to prepare investment plans and access financial resources to support CCA mainstreaming, up-scaling and technology development and transfer, capacity development. 5. Support countries and especially staff working within the ministries of agriculture to engage in climate change negotiations and dialogues (e.g. UNFCCC). 6. Strengthen dialogue and develop multi-stakeholder partnerships for adaptation across public and private sectors, non-governmental organizations and communities at all levels. 7. Strengthen community- and locally-based mechanisms (e.g. forest-user groups, agricultural and fisheries cooperatives, community networks and media) for management and delivery of services for agriculture, forestry and fisheries and to facilitate locally appropriate adaptation measures, including community-based adaptation. 8. Reinforce national and regional capacities for plant, forest and animal health and food safety and improve monitoring and control of variations in pests, diseases and food safety, related to climate change. 9. Strengthen food value chains and, in particular, improve small-scale producers' access to markets to increase resilience of food systems. 10. Promote policy dialogues between national ministries (e.g. of agriculture and environment), in order to review national policies and consider options for harmonization as well as establish mechanisms for

⁹ <http://www.fao.org/docrep/018/ap972e/ap972e.pdf>

	<p>CCA cross-sector coordination.</p> <p>11. Support the capacity development of frontline staff involved in extension work at local level.</p> <p>12. Improve the capacity of countries to screen, record and monitor the state of genetic resources and traits using molecular and related technologies.</p> <p>13. Support countries to improve their assessment of soil fertility and effectiveness of land management practices as well as identify hot spots of land degradation or potential catchments for soil organic carbon sequestration.</p> <p>14. Strengthen capacities of Member States to adapt to climate change through improved agricultural water management.</p>
Economic diversification	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>FAO-Adapt provides support to stakeholders to assess and understand current livelihood systems, adaptive capacities and vulnerabilities of different production systems to climate change. Analysis and support includes carrying out production-budget assessments and value chain analysis of selected products as well as developing risk management models which take into consideration farm household decisions, climatic data as well as potential risks of losses. Based on these assessments, support is provided on the identification of future viable production systems, markets and the diversification of livelihoods and income generation strategies to increase food security. Integrated systems, small-scale enterprise and the development of off-farm and non agricultural activities are also considered options.</p> <p>For example, projects such as Regional Fisheries Livelihoods Programme for South and South East Asia¹⁰, the Sustainable Fisheries Livelihoods Programme in West Africa¹¹ and the Bay of Bengal Large Marine Ecosystem Project¹² have supported the understanding of livelihood assets and diversification potentials within fisheries. Aquaculture, one of the fastest growing food production systems and potential source for economic diversification across the sectors is supported by FAO through technical guidance¹³, aquaculture development and training projects¹⁴, including directed assistance to integrated systems such as rice-fish and irrigation-fish systems.</p>
Climate change related disaster risk reduction strategies, early warning systems, risk management	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Increasing frequency and intensity of extreme weather events calls for strengthened disaster risk management, improved local practices for risk reduction and enhanced emergency response and rehabilitation interventions. Building on its long-standing experience in sustainable development and disaster risk management, FAO prioritizes actions for disaster risk reduction as an entry point to climate change adaptation in areas under frequent threat of climate-related emergencies. Work includes:</p> <p>1. Supporting community-based, national and trans-boundary action for disaster risk reduction including measures such as risk assessment, early</p>

¹⁰ www.rflp.org/

¹¹ <ftp://ftp.fao.org/FI/brochure/SFLP/SFLPinWA.pdf>

¹² www.boblme.org/

¹³ www.fao.org/fishery/aquaculture/en

¹⁴ Such as www.fao.org/tc/tcp/guinea_en.asp

	<p>warning and sustainable, gender-sensitive practices to enhance preparedness for climate-related hazards, such as floods and droughts, in agriculture, forestry and fisheries.</p> <p>2. Expand and improve transition and linkages between emergency response, rehabilitation planning and development, and integrating “building back better” principles to foster risk mitigation, prevention, preparedness and adaptation.</p> <p>3. Facilitate the development of disaster risk reduction strategies in agriculture, forestry and fisheries to prevent food insecurity and reduce impacts of climate-related hazards and shocks; promote the integration of disaster risk management into sectoral development plans and programmes, including into water and land management.</p> <p>4. Create mechanisms to improved access to services and resources (land, farm inputs, genetic resources), safety nets, etc. Including the creation of new networks or use of new technologies, for example the use of mobile phone technology for information access on issues on weather, pest and disease outbreaks, markets, etc.</p>
<p>Understanding, coordinating and cooperating on climate related displacement</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Limited compared to other categories, however some work is being undertaken in regards to migration due to climate change and is taken into account in the voluntary guidelines on the responsible governance. For example climate change is leading to changes in fish distributions and, hence causing both the temporary and long-term displacement of fishers.</p>
<p>Technology transfer, research and development</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No The built-in adaptation capacity of ecological and human systems may not be enough to deal with expected medium- to long-term impacts of climate change. Therefore, FAO supports the development and dissemination of technologies, practices and processes related to agriculture, forestry, fisheries and rural energy demands, as well as rural income diversification with the aim to increase resilience of the production systems and livelihoods. Considering the limited access of women to appropriate technologies, which curbs their productivity potential, special attention is paid to ensuring adequate access of technologies to women. The key priorities are:</p> <p>1. Promote the breeding and conservation of crops, trees, livestock and fish stocks which are suitable to new climate conditions.</p> <p>2. Support the development and dissemination of technologies and practices and enhance local knowledge to improve the adaptive capacity of production and management systems and value chains in agriculture, forestry and fisheries.</p> <p>3. Identify and promote technologies for efficient and safe use of inputs in agriculture, forestry and fisheries (energy, fertilizer, water, seeds, feeds, pesticides) and for waste management.</p> <p>4. Identify and promote ecosystem-based practices, including in soil, land, water, forests, rangeland and fisheries management.</p> <p>5. Create communication strategies and systems to enhance participation, knowledge sharing and promote innovations and community-based adaptation. Achieved using appropriate methods, processes and media, such as NGO networks, community radio, information and communication technologies, farmer field schools and extension services.</p>

	<p>6. Promote work on integrated food-energy systems to enhance smallholders' self-sufficiency in energy, reduce expenditure on agricultural inputs and contribute to their capacity to adapt to climate change.</p> <p>7. Provision of equipment and technologies for soil and water management and production, harvest and processing activities.</p>
Education and public awareness	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No FAO-Adapt provides support in strengthening extension, formal and non-formal educational mechanisms, for example Farmers-Field-School and related Junior farmer Field and Life schools have been recently used as means to transfer knowledge on adaptation to farmers, foresters and fisher folk. These areas of work are fundamental to improving skills at the rural community level. Public awareness strategies and the use of different media (including radio) and partners are used to enhance participation, and information and knowledge sharing. In addition FAO, in collaboration with partner, also support global awareness raising campaigns, field and oceans days, exchanges and visits. In addition to raise awareness but most of all promote the changes of behaviours. Additional support includes the preparation and testing of educational and training packages. The main objective is to build a culture of innovation, and resilience, and to institutionalize awareness-raising on climate change adaptation.</p>
Systematic observation for climate data collection, archiving, analysis and modelling	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Any details:</p> <p>FAO systems:</p> <ol style="list-style-type: none"> 1. digital soil map of the world and derived soil properties (FAO/UNESCO), 2. the global agro-ecological zones study (FAO/IIASA), 3. regular Forest Resource Assessments, 4. Agro-Maps on national and subnational crop/livestock, 5. production and land use statistics, 6. global agrometeorological data, 7. software for climate analysis and impact assessment on agriculture, 8 status of land resources, 9. Soil and Terrain Database (SOTER), 10. global irrigation statistics (AQUASTAT) and 11. information generated by the Land Degradation Assessment in Drylands (LADA) project. <p>Links to core FAO CC data and tools services can be found at the following links:</p> <p>Climpag: www.fao.org/nr/climpag Climwat: www.fao.org/nr/water/infores_databases_climwat.html</p>
Principles guiding support¹⁵	
Any details on how the support provided ensures a country-driven, gender-sensitive, participatory and fully transparent approach; takes into consideration vulnerable groups, communities and ecosystems; is based on and guided by the best available science, traditional and indigenous knowledge; and leads to the integration of adaptation into	<p>FAO's activities and support on adaptation are delivered on a demand-driven basis, based on the specific requests/needs of countries. FAO-Adapt has a core set of defined and agreed principles which are founded on FAO's long experience in people-centered work on agriculture, rural development and climate change. These principles state that projects must:</p> <ol style="list-style-type: none"> 1. Be country-driven, having the endorsement of countries and be implemented with national support. 2. Reduce climate change vulnerability (especially rural communities and small holders/fishers). 3. Mainstream CC in development planning (including agriculture fisheries and forestry policy and development).

¹⁵ For details, please see paragraph 12 of decision 1/CP.16 <<http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>>.

<p>relevant social, economic and environmental policies and actions</p>	<ol style="list-style-type: none"> 4. Build synergies between adaptation, mitigation, sustainable development and food security activities. 5. Promote an ecosystem approach. 6. Participatory, gender-sensitive, territorial management approaches are used which are tailored to local requirements. 7. Take into consideration vulnerable groups and communities. 8. Deliver through partnerships and collaboration. 9. Be guided by the best available science and take into consideration traditional and indigenous knowledge. 10. Lead to the integration of adaptation into relevant social, economic and environmental policies and actions. 11. Use practices, technologies and actions that have a proven track record of success. 12. Create a sense of ownership by the stakeholders to ensure long term sustainability of the actions.
<p>Resource(s) of support</p>	
<p>Main source(s) of financial support, including volume/amount disbursed (provided by the reporting institution/agency)</p>	<p>FAO staff and other human resources are supported by regular programme contributions from member states. In addition FAO-Adapt is supported by extra-budgetary resources, especially GEF funds, donors and also UN joint programmes and Technical Cooperation Programme (TCP).</p> <p>Current donors include European Commission, Japan, Norway, Spain and Sweden.</p>
<p>Other source(s) of financial support, including volume (includes support provided by collaborating donor agencies/countries, as well as beneficiaries)</p>	<p>FAO-Adapt country initiatives are supported by unilateral, bilateral and multilateral donor contributions as well as co-financing and in kind contributions from other agencies and organizations.</p>
<p>Methods of delivery (e.g. direct access, concessional loans, etc.)</p>	<p>FAO supports member countries in accessing both direct access sources of funding or when requested indirect funds which are channelled through FAO or other UN or multilateral organizations. Funding sources of current adaptation initiatives include: GEF, LDCF, SCCF, NFFP, donor contributions, technical support through FAO TCPs).</p>
<p>Additional information (including description of the nature of financial sources: new and additional? ODA?)</p>	<p>Technical services provided by FAO are covered by regular budgetary and extra budgetary contributions of FAO member states. FAO-Adapt country initiatives are supported by unilateral, bilateral and multilateral donor contributions. Funding for the implementation of adaption measures may also be achieved through adjustment in national policy and financial arrangements and allotments to the different sectors.</p>
<p>Other types of support, including technology transfer and capacity building</p>	<p>Capacity building and the transfer of knowledge, resources (e.g. genetic resources) and technologies is at the core of many FAO-Adapt programmes. In this regards, FAO seeks to support countries and decision-makers by building capacities and developing innovative, user-friendly tools and methods for assessing vulnerability, present and future impacts and, in turn, planning and implementing adaptation strategies and programmes. FAO also promotes sharing of existing climate change-related data and information among institutions. Communication for development and information-sharing activities help promote people's participation and ownership of adaptation planning and activities as well as increase their ability to respond to climate change issues. Capacity development is also undertaken in partnership with other institutions and with counterparts at the country and regional levels which help accelerate and improve the capacity development assistance being provided.</p> <p>The FAO-Adapt programme also includes the building of capacity within FAO to be able to better respond to member country needs. This includes better ability to respond on cross-sectoral approaches for adaptation, integrating climate change into sectoral and food security policies and</p>

	addressing social and institutional dimensions of adaptation. Capacity has also been improved in supporting countries in mobilizing and combining resources from multiple funds; developing adaptation projects and programmes and enhancing collaboration with global, regional and national institutions.
Key stakeholders	
Beneficiaries (<i>specify their number and nature, e.g. national / subnational level, institution, local authorities, civil society groups, vulnerable communities, etc.</i>)	FAO-Adapt is a support mechanism for member states. It provides advice or support to implement regional, national, sub-national and local programmes. Based on government objectives these programmes will directly benefit ministries, education entities, local authorities, extension workers, local practitioners, consumers, small enterprises and other private sector, producing and processing cooperatives and organizations, association producers, breeders and seed sector, research institutions, agricultural services and other stakeholders along the value chain. The ultimate aim of FAO-Adapt programmes is to strengthen the ability of farmers and in particular smallholders, especially in developing countries, including small-scale farmers, fishers, pastoralists, foresters and the urban poor – particularly women – whose lives and livelihoods are threatened by climate shocks and climate change. Small-scale farmers represent 90 percent of the rural poor and make up the majority of the world’s hungry population.
Key participants of the support initiative and their respective roles (<i>list any other implementing agencies, government agencies, and donors to the initiative</i>)	FAO member countries in collaboration with: 1. National ministries of agriculture and food security, forestry, fisheries, Rural Development. 2. Government institutes. 3. Universities and colleges (e.g. in Canada, Malawi, Norway, UK, Vietnam, Zambia) 4. National agricultural research services, extension services. 5. Farmer, forester and fisher groups, cooperatives, civil society organization, etc. 6. National associations and cooperatives (e.g. seed associations). 7. Global partnerships such as the Global Partnership for Climate, Fisheries and Aquaculture (PaCFA) and the Climate Smart Agriculture (CSA) partnership. 8. International entities and research organizations (e.g. CGIAR, CIAT) 9. Private sector. 10. Donors, including European Commission, Japan, Norway, Sweden. 11. Regional organizations, such as NEPAD, ECOWAS, ASEAN, APFIC, etc and the regional fishery bodies and LME projects
Progress to date	
Progress, including results achieved so far and how progress is monitored and evaluated (<i>How does the current situation differ from the situation present before support was given – i.e. has the action been effective and how?</i>)	FAO-Adapt programmes have achieved a number of results including: 1. Improved institutional and technical capacity. 2. More coherent and aligned policies have been fostered through policy dialogues with ministries of agriculture and environment. 3. Integration of agriculture and food security perspective into adaptation plans and facilitation of implementation of risk reduction plans. 4. Demonstration of good practices at the community levels. 5. Introduction of new crop varieties tolerant to climate risks. 6. Farmers, foresters and fishers are better informed and taking appropriate “adaptive” decisions. 7. Staff from Ministries of agriculture have improved capacity to participate in international climate change negotiations. 8. Strengthened formal and non-formal educational mechanism resulting in greater awareness of CC issues and responses of individuals. 9. Greater awareness, for example on the impact of CC and potential

	options within the fisheries and aquaculture sector has greatly increased over the last 5 years resulting in a number of specific NAPAs and member country requests for FAO support.
Best practices and lessons learned <i>(including barriers to effective delivery of support; ways of enhancing coherence and synergy across levels)</i>	A full stakeholder engagement to ensure participation, ownership and the creation of an enabling environment is essential. A key issue has also been the often limited access to information, data or models needed to accurately predict local changes in climate and select appropriate interventions (this is especially the case for aquatic systems).
Other relevant information <i>(including links to publications, documents, webpages, progress reports, videos etc.)</i>	<p>FAO-Adapt overview: www.fao.org/climatechange/27594-03ecd7bd225b93086e7dca3944de64307.pdf</p> <p>Climate Smart Agriculture Sourcebook: www.fao.org/climatechange/climatesmart/en/</p> <p>Building resilience for adaptation to climate change in the agriculture sector: www.fao.org/docrep/017/i3084e/i3084e.pdf</p> <p>Economics and Policy Innovations for Climate-Smart Agriculture (EPIC): www.fao.org/climatechange/epic</p> <p>Climate change fisheries and aquaculture: www.fao.org/fishery/topic/13788/en</p> <p>FAO Forests and Climate change: www.fao.org/docrep/017/i2906e/i2906e00.pdf</p> <p>Nuclear Techniques in Food and Agriculture: www.naweb.iaea.org/nafa/swmn/index.html www.youtube.com/watch?v=vbaTz8TO55E www.iaea.org/newscenter/multimedia/photoessays/dripirrigation/ www-naweb.iaea.org/nafa/swmn/index.html</p>
Further Engagement in the Work of the Adaptation Committee	
Would your organization be interested in continuing to engage in initiatives led by the Adaptation Committee.	Name of contact person: Ms Xiangjun Yao (NRC) Email address: Xiangjun.Yao@fao.org or NRC-director@fao.org
Please provide details of other organizations active in your region, which could contribute to the work of the AC.	Specific regional and country partners can be provided on specific requests and requirements of AC.

Annex: FAO Commission on Genetic Resources for Food and Agriculture

Objectives

Genetic resources for food and agriculture (i.e. the many different varieties and breeds of plants, animals, aquatic resources, forests, micro-organisms and invertebrates) have been used by humans for millennia to cope with global and local changes. Maintaining a high diversity of genetic resources means maintaining options for adaptation to climate change. Genetic resources are the raw materials that provide the necessary characteristics for adaptation, for instance, capacity to tolerate high temperatures and droughts, resistance to diseases and parasites, capacity to utilize scarce and poor-quality feed and tolerance of lower water quality.

The Commission's Programme of Work¹⁶ has two objectives:

- A. Promote the understanding of the roles and importance of genetic resources for food and agriculture in food security and nutrition and in ecosystem function and system resilience in light of climate change.
- B. Provide technical information to enable countries to understand the role of genetic resources for food and agriculture in climate change mitigation and adaptation.

Countries and/or regions supported

Global. The Commission has 177 member countries plus the European Union, listed [here](#).

Sectors addressed

Genetic resources for food and agriculture
Biodiversity for food and agriculture
Agriculture, Forestry, Fisheries and Aquaculture

Timing and duration

First phase 2013 – 2017

Planning, prioritizing and implementing adaptation actions identified in national/subnational plans and strategies, national communications, NAPAs etc.

- The Commission aims to identify and promote the potential role of genetic resources for food and agriculture to support the planning, prioritization and implementation of adaptation actions, at different levels.
- The Commission is currently preparing a **survey to gather lessons learned about ways and means to use agricultural biodiversity to build resilience to climate change in food and agriculture systems**. Based on the lessons learned, **technical material and guidelines** for the integration of genetic-diversity considerations into climate change adaptation planning will be developed and could be used to facilitate the implementation of NAPAs and NAPs and support training workshops on adaptation.
- Member countries of the Commission agree on priority areas and develop specific plans of priority actions. Those **Global Plans of Action** for genetic resources provide a framework to guide the implementation of actions addressing genetic resources, including climate change considerations.

Impact and vulnerability assessments (including of financial needs)

- The Commission conducted **sectoral studies** on climate change and genetic resources for food and agriculture looking at the state of knowledge, risks and opportunities (see Background Study Papers: www.fao.org/nr/cgrfa/climatechange).
- To some degree monitoring is possible through periodic **global assessments** on the state of the world's genetic resources for food and agriculture. Existing assessments cover plant, animal and forest genetic resources, while reports on the state of aquatic genetic resources and on the world's biodiversity for food and agriculture are under preparation and due in 2016-2017.
- In 2014, the Commission foresees to compile information on **hotspots of biodiversity for food and agriculture** under particular threat from climate change.

¹⁶ CGRFA-14/13/Report, Appendix D

Strengthening institutional capacities (of national institutions) and creating enabling environments

- **Global Plans of Action** are policy instruments, providing a framework to guide the implementation of actions (including in relation to climate change) at community, national, regional and international levels for the conservation and sustainable use of genetic resources for food and agriculture.

Key stakeholders

Beneficiaries (specify their number and nature, e.g. national / subnational level, institution, local authorities, civil society groups, vulnerable communities, etc.)

- Direct beneficiaries of the work of the Commission are country representatives (mainly from competent authorities on food and agriculture) and national institutions involved in genetic resources for food and agriculture, who are expected to involve relevant stakeholders at different levels, incl. farmers, livestock keepers, forest managers and fisher folk.

Key participants of the support initiative and their respective roles (list any other implementing agencies, government agencies, and donors to the initiative)

- Key participants are **country representatives and national institutions**, as described above, with the goal to enable them to participate in planning and implementing adaptation actions by fully exploiting the potential of genetic resources for food and agriculture for adaptation.

Progress, including results achieved so far and how progress is monitored and evaluated (How does the current situation differ from the situation present before support was given – i.e. has the action been effective and how?)

- The Commission has conducted a number of **sectoral studies** on climate change and genetic resources for food and agriculture (Background Study Papers: www.fao.org/nr/cgrfa/climatechange).
- The Commission is preparing a **survey** to gather lessons learned about ways and means to use agricultural biodiversity to build resilience to climate change in food and agriculture systems. An expert workshop is foreseen to discuss survey results and **guidelines** for the integration of genetic-diversity considerations into climate change adaptation planning.

Best practices and lessons learned (including barriers to effective delivery of support; ways of enhancing coherence and synergy across levels)

- Measures to promote the use of genetic diversity in climate change policy and programmes are of outstanding importance. However, the role of genetic resources for food and agriculture in adaptation has received little attention in climate change policy processes and programmes.

If you are interested the work of the commission please contact: Linda Collette (Linda.Collette@fao.org)

Other relevant information (including links to publications, documents, webpages, progress reports, videos etc.)

Commission's website: www.fao.org/nr/cgrfa

Videos about the Commission: www.fao.org/nr/cgrfa/cgrfa-media

Global assessments - State of the World Reports

2013 (forthcoming): State of the World's Forest Genetic Resources

<http://www.fao.org/docrep/meeting/027/mg268e.pdf>

2009: Second State of the World's Plant Genetic Resources for Food and Agriculture

www.fao.org/docrep/013/i1500e/i1500e00.htm

2007: The State of the World's Animal Genetic Resources for Food and Agriculture

www.fao.org/docrep/010/a1250e/a1250e00.htm

1996: First State of the World's Plant Genetic Resources for Food and Agriculture

<ftp://ftp.fao.org/docrep/fao/meeting/015/w7324e.pdf>

Global Plans of Action

2013: Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources

<http://www.fao.org/docrep/meeting/027/mf838e.pdf>

2011: Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture

www.fao.org/docrep/015/i2624e/i2624e00.htm

2007: Global Plan of Action for Animal Genetic Resources www.fao.org/docrep/010/a1404e/a1404e00.htm

1996: Global Plan of Action for Plant Genetic Resources for Food and Agriculture

<ftp://ftp.fao.org/docrep/fao/meeting/015/aj631e.pdf>

Sectoral studies on climate change and genetic resources for food and agriculture

<http://www.fao.org/nr/cgrfa/climatechange/>

BSP No. 60: *Economics of PGRFA management for adaptation to climate change: a review of selected literature*;
BSP No. 57: *Climate change and micro-organism genetic resources for food and agriculture: State of knowledge, risks and opportunities*;

BSP No. 56: *Climate change and forest genetic resources - state of knowledge, risks and opportunities*;

BSP No. 55: *Climate change and aquatic genetic resources for food and agriculture - state of knowledge, risks and opportunities*;

BSP No. 54: *Climate change and invertebrate genetic resources for food and agriculture - state of knowledge, risks and opportunities*;

BSP No. 53: *Climate change and animal genetic resources for food and agriculture - state of knowledge, risks and opportunities*.

A synthesis of the sectoral studies is in preparation.