

Regional Project Concept Template (Category A)

The information contained in this template should be uploaded to the PCMF IT platform by the Chair of the relevant regional cooperative agreement or the NLO of the Member State submitting the concept by 31 May 2014 at the latest. Based on this information the IAEA will assess whether this project concept is in line with the TC quality criteria and requirements. Concepts positively appraised will be further developed into full project documents during the design phase.

Region:	Latin America		
Regional/Cooperative agreement (if applicable)	NA	Priority no. given by regional/cooperative agreement (for concepts proposed under the auspices of regional cooperative agreements)	
Title	Strengthening phytosanitary surveillance and control measures against fruit flies using the sterile insect technique in an AW-IPM (area wide and integrated pest management approach), for the protection and expansion of the horticultural production and marketing in Latin America.		
Field of activity	Agriculture / Pest Control.		
Regional project category	<i>Joint TC activities with a regional or international entity</i>		
Names and contact details of project counterparts and counterpart institutions (starting with the main counterpart)	<p>Ministries of Agriculture of Member Countries</p> <p>Latin American Region, divided in the following sub-regions:</p> <p>Sub-region North: Mexico, Belize, Central America and Dominican Republic.</p> <p>Belize Hernán Zetina, Coordinador Programa Moscamed, Belize Agricultural Health Authority- Ministry of Natural Resources and Agriculture. Hummingbird Highway, Apartado postal: 169. <i>Belmopán</i>, Cayo District, Belize. Tel: (501) 8244873, Fax: (501)8243773, E-Mail: ernzetina69@hotmail.com.</p> <p>Costa Rica Ing. Arturo Saborío Céspedes, Jefe Programa Nacional Moscas de la Fruta Servicio Fitosanitario del Estado, Ministerio de Agricultura y Ganadería 500 m Este del Aeropuerto Tobías Bolaños Pavas . Tel: (506) 25493631 Fax (506)25493698. Apdo. postal 1521-1200 Cod. Postal 10109. Pavas, San José Costa Rica. E-Mail: asaborio@sfe.go.cr</p> <p>Sub-region Andean: Ecuador, Perú, Colombia y Bolivia</p> <p>Colombia Emilio Arévalo Peñaranda Director Técnico de Epidemiología y Vigilancia Fitosanitaria Instituto Colombiano Agropecuario - ICA, Tel 57-1-3323766 , 57-1-3323700 ext. 1381-1380</p> <p>Sub-region South Cone: Brasil, Chile, Uruguay y Argentina</p>		
Analysis of regional Gap / Problems/needs	The countries of the Latin American region have an important horticultural sector, which produces goods for local consumption and for export / international trade. The horticultural sector is in general the fastest growing in relation to other products considered traditional in the agricultural production of the region. This sector has the potential to generate employment, environmental benefits, welfare to the population as well as generating foreign currency for the countries of Latin America within the		

Con formato: Español (Costa Rica)

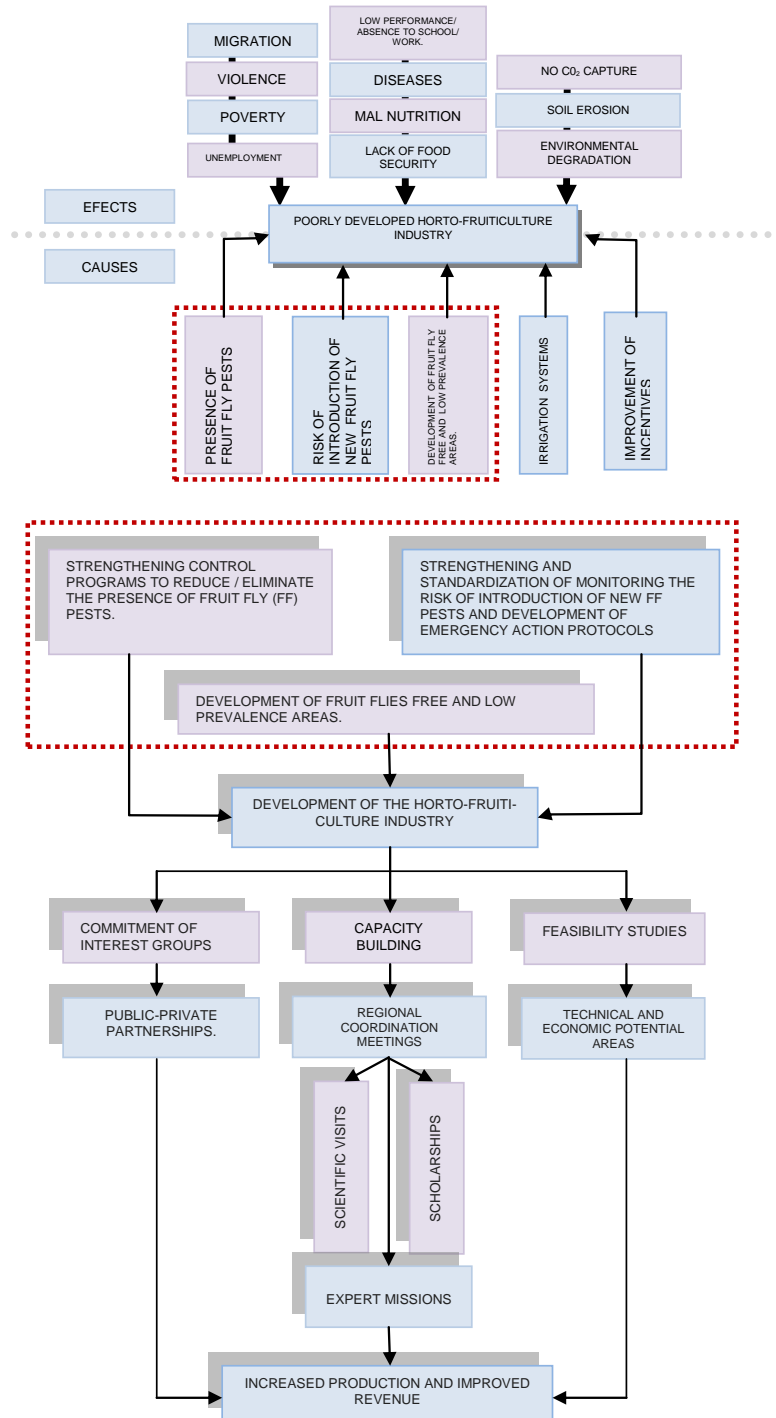
	<p>framework of existing trade agreements in the region.</p> <p>Moreover, it is well documented that a human diet, based on the consumption of fruit and vegetables has a favorable impact on:</p> <ol style="list-style-type: none"> 1.) Reducing the incidence of non-communicable diseases (which represent a growing economic burden in Latin America) and 2.) Improve food security, contributing to the reduction of malnutrition. Both aspects have generated the need and an overall upward trend in the consumption of these products which also results in an increase in demand and an opportunity /need for production and employment generation. One of the main difficulties encountered by Latin-American horticulture is the presence of the Mediterranean fruit fly (introduced in 1901 in Brazil) and the native fruit flies, which have meant high costs due to: <ol style="list-style-type: none"> 1.) Production losses (impacts on growers, food security and human health). 2.) Opportunity losses (horticultural trade and development). 3.) Increased costs due to pest control activities. 4) Environmental damages to the countries of the Americas. <p>To all the items above, the current risk involved in the high rate of movement of persons, the presence of native pests in the region, and the risks inherent in the importation and internal movement of products has to be added. Therefore, to provide sustainability to the development that the horto-fruiticultural sector generates there is the need to:</p> <p>A.) Strengthen, expand and harmonize surveillance systems including detection and quarantine of the region in order to:</p> <ol style="list-style-type: none"> 1.) Timely detect the possible introduction of species of fruit flies that do not exist in the region (e.g. <i>Bactrocera</i> spp and <i>Dacus</i> spp) and act promptly to prevent their establishment. 2.) Limit the movement of the species present /native in the region for example, species of the genus <i>Anastrepha</i> (<i>A.grandis</i>, <i>A.suspensa</i>, <i>A.ludens</i>). 3) Limit the movement of invasive / non-native species that exist in certain areas of the region (i.e. Mediterranean fruit fly (<i>Ceratitidis capitata</i>, Wied) and the genus <i>Bactrocera</i>: <i>B. carambolae</i>, <i>B.oleae</i>) <p>B.) Strengthen the technology of the existing fruit fly control programs in Latin-America in order to:</p> <ol style="list-style-type: none"> 1.) Further progress in the eradication of non-native (e.g. <i>C. capitata</i>) species in the region. 2.) Reduce and gradually eliminate the damage / losses caused by native and introduced fruit fly species in Latin America (e.g. <i>Anastrepha</i> spp. <i>A.ludens</i> (in particular), <i>A.obliqua</i>, <i>A. grandis</i>, <i>A. fraterculus</i>, and <i>B. carambolae</i>). 3.) Support the development of free and / or low prevalence fruit fly areas. 4.) Strengthen the growth of horto-fruiticultural production providing greater certainty in the productivity, profitability, and marketing of the produce and to 5.) Reduce the reliance on chemical control, improving food safety, favoring biological control and protecting the environment using the sterile insect technique (SIT). <p>C.) Facilitate capacity building for the marketing of horticultural products in order to:</p> <ol style="list-style-type: none"> 1.) Generate self-sustainability, 2.) Materialize the generation of local jobs, 3.) Support economic stability, via income diversification of the countries involved in the project, 4.) Ensure progress, sustainability and interest of the countries involved in the proposed quarantine and control actions. <p>D.) Promote the integration and guidance of the national and regional plant protection organizations and other relevant public and private sector towards a common goal in order to:</p> <ol style="list-style-type: none"> 1.) Provide additional support and coordination to the efforts that countries carry out individually to address the problem of fruit flies to realize the economic potential, environmental and human health benefits that the control of fruit flies could generate in the region. <p>The countries of the region, through their Ministries of Agriculture in coordination with national and regional plant and animal health organizations and the agricultural industry of the countries involved, could cooperate with regional control programs (e.g. Regional Medfly Program) through a regional technical cooperation project supported by the International Atomic Energy Agency (IAEA), which allows to unify efforts, approaches and experiences to improve pest control using area-wide SIT and</p>
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	<p>thus strengthen horticultural production, promote food security, health and economic growth for the benefit of Latin America.</p> <p>Due to past efforts through technical cooperation projects of the FAO/ IAEA technical capacity has been developed through training in integrated pest management of fruit flies, workshops and technical and economic feasibility studies in the countries of the Latin-American region. This resources should be used as a platform to strengthen, in particular, the regional and country ability to respond to needs of fruit fly control as well as the production and marketing of fruit and vegetables.</p> <p><i>Give an in-depth analysis of the major problems/needs to be addressed by the project, as well as of their causes and effects; and explain how these are linked to regional development plans or frameworks (or equivalent). Refer to past efforts made in addressing these problems/needs, if any, and explain how the current project proposal builds upon them. Attach any supporting documents (e.g. texts of regional development plans).</i></p>
<p>Why should it be a regional project?</p>	<p>A regional approach is needed as it is a transboundary problem derived from the characteristics of the issues raised, where pests are common and have a high dispersal capacity, without recognition of borders and where there is also a high movement of people and goods in the region. Conversely, without coordination at regional level, the lack of equivalence in the detection, quarantine and control measures carried out, would generate a higher risk of introduction of exotic species (with the inherent costs / losses) and further delay in achieving results which would increase the costs / risks on food security, job creation and others, in the countries of the region.</p> <p><i>Indicate why it is better to address these problems/needs through a regional project (as opposed to a national one).</i></p>
<p>Stakeholder analysis and partnerships</p>	<p>1.) International organizations (IAEA, FAO, WHO, IPPC, WTO), 2.) Regional Plant Health Organizations (OIRSA, COSAVE), 3.) Ministries of Agriculture of the respective countries, 4.) Local and Regional Programs in management and pest control (e.g. Moscamed Regional Program), 5.) Local producers and exporters, 6) Latin American Conservation Associations, 7.) Investors, 8.) Local authorities, 9.) General population (increased supply, better prices, better nutrition).</p> <p><i>Describe the stakeholder analysis conducted, specifying all the interested or affected parties, end users, beneficiaries, sponsors and partners identified, with clearly defined roles for each entity.</i></p>

<p>Overall objective (or developmental objective)</p>	<p>The primary objectives of this project are:</p> <ol style="list-style-type: none"> 1.) Harmonize and strengthen phytosanitary surveillance systems (detection and quarantine) to protect the region from possible introductions of non-native fruit fly pests. 2.) Strengthen the technological level of integrated fruit fly control programs with an SIT component to advance in pest control activities (in large, medium and small commercial production and in backyard production areas). 3.) Maintain free and low-prevalence areas within the participant countries and according to their pest status/feasibility, expand and establish new areas. 4.) Provide certainty and promote horticulture and trade in the region. <p>Each of the participating countries / sub-regions would establish their specific objective based on each of the general objectives above, according to their pest status, pest of interest, technological development in pest control and institutional capacity.</p> <p>*(Nota de pie de página: The IPPC replaced the term "exotic" by "non-native") <i>State the objective to which the project will contribute, and demonstrate its linkage with any regional or broader development goal or priority. It has to be in line with the problems/needs identified.</i></p>
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Analysis of objectives

Draw up an objective tree to highlight the hierarchy of objectives as well as the cause-effect logic that this project is expected to achieve.



Role of nuclear technology and the IAEA	<p>Starting from the fact that the pest problems are transboundary and that it is very important that a control method that is cost-effective and environmentally friendly be used, integrating the sterile insect technique (SIT) as part of the integrated pest management (IPM) system, meets the stated requirements.</p> <p>SIT is one of the control techniques used for the integrated pest management of pests with high potential for economic damage over large areas (AW-IPM). SIT has been used successfully in several IAEA and FAO member countries.</p> <p>Therefore, it is proposed that the IAEA, through its mandate to promote nuclear applications in agriculture, will constitute itself as a facilitator of the goals set by the member countries through a regional technical cooperation project.</p> <p><i>Indicate the nuclear technique that would be used and outline why it is suitable for addressing the problems/needs in question. Is this the only available technique? Does it have a comparative advantage over non-nuclear techniques?</i></p> <p><i>What specific role is the IAEA expected to play in the project?</i></p>						
Project duration	<p>Four years starting from 2016.</p> <p><i>Indicate a realistic starting date and the number of years required to complete the project. (In the case of projects expected to exceed four years, an assessment will be conducted before the end of the fourth year to decide on the validity of an additional year.)</i></p>						
Requirements for participation	<p>The minimum requirements expected of the partner institutions in the member countries (Ministries of Agriculture) are:</p> <ul style="list-style-type: none"> ➢ Include the project as a priority in the strategic plans of development of the agricultural sector of each country. ➢ Clearly identify the goals and objectives of each country. ➢ Designate an official as counterpart/partner of the project. ➢ Facilitate financial and human resources to support the implementation of the project. ➢ Facilitate coordination with other interested organizations including regional plant protection organizations and the horticultural industry. <p>Compliance with the requirements would be verified through official communication and documentation.</p> <p><i>Indicate the minimum requirements that counterpart institutions in Member States would need to meet in order to participate in this project, and how the fulfilment of these requirements will be verified.</i></p>						
Participating Member States	<p>Sub-region North: México, Belice, Central América and Dominican Republic. Sub-region Andean: Perú, Colombia, Ecuador y Bolivia. Sub-region South Cone: Argentina, Chile, Brazil, Uruguay. (17 Countries included in this proposal).</p> <p>Each country will actively participate in the implementation, evaluation and follow-up of project activities according to the specific objectives by contributing with financial and human resources. Countries will rotate the venue of evaluation and follow-up meetings. Likewise, countries will facilitate coordination with participating local and regional organizations.</p> <p><i>List the Member States expected to participate in this project that meet the requirements established above. Indicate the role of each Member State in the project.</i></p> <p>Country: _____ Role:</p> <p style="padding-left: 150px;">€ Resource (providing expertise)</p> <p style="padding-left: 150px;">€ Target (receiving expertise)</p>						
Funding and project budget	<p><i>Provide an estimate of the total project costs and the funding expected from each stakeholder:</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%;">Euro</th> <th style="width: 15%;">Comment</th> </tr> </thead> <tbody> <tr> <td><i>Government cost-sharing</i></td> <td style="text-align: center;">48,000</td> <td style="text-align: center;">8% of IAEA contribution</td> </tr> </tbody> </table>		Euro	Comment	<i>Government cost-sharing</i>	48,000	8% of IAEA contribution
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	Ministries of Agriculture	850,000	Through the Ministry of Agriculture to be applied in each country according to specific financial plan and technical work. Contributions are made in financial resources and / or in kind.	
	<i>Other partners</i>			
	Regional Plant Protection Organizations	150,000	OIRSA, COSAVE Financial and in-kind contribution..	
	Horticultural Industry	50,000	Financial and in-kind contribution..	
	<i>IAEA Technical Cooperation Fund (TCF):</i>	<i>Fellowships / Scientific visits / Training courses/ Workshops</i>	250,000	
		<i>Experts</i>	100,000	Expert participation in workshops, feasibility studies, etc..
		<i>Equipment</i>	250,000	Trapping materials, microscopes, GPS, GIS, etc.
	TOTAL	1,698,000		