Annex I

"Regional Training Course on Capacity Development of Hybrid Rice in Asia"
and
"Regional Expert Consultation on Hybrid Rice Development in Asia: Constraints and Opportunities"

Hunan Hybrid Rice Research Center (HHRRC)
Changsha, People's Republic of China
19 October-3 November 2016

(Events supported by the South-South Cooperation [SSC] Programme between the Food and Agriculture Organization of the United Nations [FAO] and the People's Republic of China)

1. Background and rationale

Relevance in food security and capacity development of hybrid rice in Asia

Rice is the staple food of about half of the world's population, of which more than 90 percent of consumers inhabit Asia. Therefore, rice plays an important role in ensuring food security, while contributing to poverty and malnutrition alleviation in Asia and the rest of the world. As the world's population continues to increase, there will be further demand on rice supply to meet additional consumption.

The total consumption of 439 million tonnes in 2010, and various outlooks for 2030, indicate that the global demand for rice is within the range of 503-544 million metric tonnes. This is equivalent to the average growth rate of 1 percent per year, compared to the total consumption in 2010.

The above outlook highlights the need to intensify rice production in Asia to meet the rising demand, as the rice lands have diminished due to urbanization, industrialization and agricultural diversification. The increase of rice production in the future would primarily rely on the increase of productivity. Nevertheless, it is recorded that the growth of rice productivity has declined in recent years due to little improvement in the rice yield potential. To overcome this challenge, the adoption of hybrid rice technology, as experienced in China, would offer an alternative to further raise the rice yield potential by exploiting the genetic expression of heterosis or hybrid vigour. However, outside China, even if hybrid rice has been cultivated in several countries over many years, the pace of adoption is still low or stagnant.

In this context, the FAO Regional Office for Asia and the Pacific (FAORAP) and the Ministry of Agriculture (MoA) of the People's Republic of China, propose to jointly organize a Regional Training Course on capacity development activities in the area of hybrid rice and a Regional Expert Consultation under the FAO-China South-South Cooperation (SSC) Programme's 2016 Work Plan.

The FAO Regional Rice Initiative (RRI)

The Regional Rice Initiative (RRI), which started in 2013 as a pilot project, then officially endorsed by the FAO Regional Conference as one of the Four Regional Initiatives (RIs) in Asia and the Pacific, was designed to contribute to FAO's new Strategic Objective (SO) 2, "Making agriculture, forestry and fisheries more productive and sustainable." It has since assisted three pilot countries, namely Indonesia, Lao People's Democratic Republic and Philippines in focusing on the application of goods and services produced by, and available from rice ecosystems and production landscapes for sustainable rice farming practices, increased production and resource-use efficiency, and, ultimately, improved food and nutrition security.

RRI supports rice farmers and producers in applying sustainable rice production practices (such as the "Save and Grow" mechanism) to rice ecosystems and landscapes, in order to increase rice production and improve resource use efficiency, and ultimately improve food and nutrition security. The initiative focuses on the importance and full use of the goods and services produced by and available from rice ecosystems and landscapes.

RRI addresses **more than just rice**. It is composed of four different components during the pilot phase: *Component 1* (aquaculture and fisheries, water resources/irrigation), *Component 2* (trees outside forests, biodiversity, landscapes and ecosystem services), *Component 3* (sustainable intensification of rice-farming systems) and *Component 4* (climate change adaptation and rice cultures/heritages).

2. Regional Training Course on Capacity Development of Hybrid Rice

Objectives

The event is supported by the FAO-China SSC Programme 2016 Phase II. Innovative technologies and tools for hybrid rice development will be introduced, in relation to other technologically important issues.

Outcomes and Outputs

The main expected outcomes of the course will be to enhance the capacity of FAO RRI focus countries in the field of research development of hybrid rice and the learning exchange of innovative technologies. Other expected outputs are:

- exchanging innovative technologies to develop high-yielding hybrid rice and ensure good quality, resistance to major diseases and insects, and tolerance to stress conditions such as drought, salinity and submergence created by climate changes;
- learning from Chinese experiences on strengthening research and development of high-yielding hybrid rice for food security, but also for providing the material for processing food;
- developing potential regional collaborations and a network on hybrid rice among the participating countries towards 2020.

Participants

The training will bring together a total of 18 technical and/or policy experts from five FAO RRI focus countries, namely: Cambodia (three candidates), Indonesia (four candidates), Lao PDR (three candidates), Philippines (four candidates), and Viet Nam (four candidates) .

Duration and format

The training course is proposed to last for two weeks, and the format will consist of indoor lectures given by the participating international and Chinese resource persons, experience exchanges amongst the participants and field trips.

3. The Regional Expert Consultation

In accordance with the Minutes of the Fifth Annual Consultation Meeting (ACM) on the FAO-China SSC Programme, held in January 2016, between the Ministry of Agricultural (MoA) of China and FAO, supporting global and regional capacity development in developing countries was identified as one of the priorities of the FAO-China SSC Programme for Asia and the Pacific region. Moreover, the capacity development activities in the areas of hybrid rice for sustainable food security in Asia and the Pacific meet the Programme's objectives and priorities.

Objectives

The main objective of the Regional Expert Consultation is to bring countries in the region together to share experiences, present their respective challenges and possible solutions, and discuss activities/programmes to promote regional hybrid rice cooperation and future development in the region. Specifically, the objectives proposed are:

- exchanging and sharing experiences, knowledge, technologies and understanding among the concerned countries;
- exchanging the national and local policies, and actions that enable to strengthen rice development;
- assessing the current status of hybrid rice production in Asia and its impacts on food and nutrition security;
- analyzing constraints and technological gaps in the development and adoption of hybrid rice in Asia, and recommendations to overcome these constraints and gaps;
- formulating a regional action plan aiming at strengthening regional hybrid rice cooperation and development in Asia.

Outputs

- presentation of regional and country status on hybrid rice production issues, potential opportunities and future plan(s) of action;
- sharing of knowledge and lessons learnt on the use of hybrid rice technology, with greater focus on policy, research and extension, Intellectual Property Rights (IPR), business development, and public-private partnership;
- formulation of regional action plan on hybrid rice development towards 2020;

- establishment of a regional network on hybrid rice;
- publication of proceedings on the outcomes of the expert consultation.

Participants and focus countries

The Regional Expert Consultation will count with a total of 40 participants. Specifically, 24 participants (two per country, mainly technical staff and senior level government management/policy makers) from 12 different countries, namely: Bangladesh, Cambodia, India, Indonesia, Lao PDR, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand and Viet Nam. The other participants will be resource persons from FAO, as well as other international/regional entities and Chinese government institutions.

Organization

The event will be co-organized by MoA and FAO, and will take place in China. The logistical and administrative arrangements will be provided by the Center of International Cooperation Service (CICOS), a public service agency of MoA, while the technical support will be provided by the Hunan Hybrid Rice Research Center (HHRRC). MoA and FAO will also identify specific participating agencies, resource persons and observers based on the needs.

Duration and format

The proposed duration of the event is of three days. It will consist of the presentations provided by country participants and resource persons, with subsequent panel discussions and interactive sessions.

4. Logistical details

- **Dates**: Regional Training Course: 19-31 October 2016;
  Regional Expert Consultation: 1-3 November 2016.

- **Location**: HHRRC, Changsha, China

- **Language(s)**: the events will be carried out primarily in English. Both trainers and trainees at the Regional Training Course are required to be fluent in English. Simultaneous interpretation between English and Chinese will be provided during the Regional Expert Consultation.

FAO Focal points

Organization	Name	Position	Email
FAORAP	Mr Xiangjun Yao	Regional Initiative Coordinator for Asia and the Pacific	Xiangjun.Yao@fao.org
FAORAP	Mr Du Pham	Rice Regional Initiative Delivery Manager, and Senior Rice Expert	Du.Pham@fao.org
FAOHQ	Mr Zhongwei Liu	FAO-China SSC Programme Coordinator	Zhongwei.Liu@fao.org

MoA China Focal Points

Organization	Name	Position	Email
CICOS, MoA	Mr Yu Yang	Division Director, Foreign Cooperation	yuyang@agri.gov.cn
CICOS, MoA	Mr Liu Jiawei	Programme officer	1514137749@qq.com

Estimated budget

All travel, accommodation, and related expenses of the participants nominated by the Governments, as well as FAO's facilitators/focal points/resource persons, will be covered by the FAO-China SSC Trust Fund. Participants from other organizations are welcome as observers on their own expenses.