United Nations E/ESCAP/67/6



# **Economic and Social Council**

Distr.: General 8 March 2011

Original: English

#### **Economic and Social Commission for Asia and the Pacific**

## Sixty-seventh session

Bangkok, 19-25 May 2011 Item 3 (b) of the provisional agenda Review of issues pertinent to the subsidiary structure of the Commission, including the work of the ESCAP regional institutions: Trade and investment

# Report of the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery

### Note by the secretariat

## Summary

The present report reviews the status of implementation of the programme of work, as well as the administrative and financial status, of the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM) in 2010.

UNAPCAEM delivered tailored technical assistance programmes to member countries to help them address technical constraints and challenges in food production through trainings and policy workshops. In the UNAPCAEM programme of work, particular attention was paid to capacity-building for least developed countries and the Pacific island countries through South-South cooperation and an inclusive development approach, with a focus on the dissemination of sustainable agricultural technologies and good agricultural practices leading to a greater regional impact.

In 2010, a pilot training on rice harvest and post-harvest technologies was designed and rolled out in Myanmar, and training workshops on high-yielding rice cultivation and seed production technology were conducted in the Democratic People's Republic of Korea, Fiji and the Philippines. To mitigate the effects of climate change, UNAPCAEM actively explored possibilities for pilot projects in the development of rural bio-energy for sustainable agriculture through sharing best practices among countries in the region. UNAPCAEM's research on agricultural machinery development in 2010 laid the groundwork to institutionalize a process for testing and promoting safe and environmentally friendly agricultural machinery for the region.

The sixth sessions of the UNAPCAEM Technical Committee and Governing Council were held in 2010 and 2011, respectively. With a new head, UNAPCAEM developed a five-year strategic plan to revitalize itself as an effective platform for capacity-building, technology transfer and information networking.

#### Contents

		Page
I.	Results achieved and outcomes in 2010	2
II.	Summary of the programme of work for 2011	4
III.	Administration and financial issues	5
IV.	Issues for consideration by the Commission	5
Annexes		
I:	Contributions in 2010	6
II:	Statement of accounts	7
III:	Report of the Governing Council on its sixth session	8

## I. Results achieved and outcomes in 2010

- 1. Since the sixty-sixth session of the Commission held in May 2010, the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM) has conducted the following activities and substantive programmes in 2010.
- As a component of the Joint Programme of the United Nations Country Team (UNCT) in China on the China Climate Change Partnership Framework (CCPF), UNAPCAEM and the Institute of Environment and Sustainable Development in Agriculture of the Chinese Academy of Agricultural Sciences jointly organized the International Seminar on the Application of the Clean Development Mechanism Facility in the Agricultural Sector, which was held in Beijing on 10 and 11 May 2010. Nearly 100 participants from around the world participated in the meeting to share the study commissioned by UNAPCAEM on application of the clean development mechanism (CDM) in the agricultural sector. Presentations and discussions focused on methodology guidelines for CDM project development, innovative bio-energy technologies, development of biogas and conservation agriculture in rural China, and sustainable cropping and its impact on greenhouse gas emissions. Seminar participants expressed great interest in exploring the CDM potential in China's agricultural sector and around the world. They also shared successful experiences and discussed mechanisms for a strategy to promote wider CDM application in countries across the Asia-Pacific region.
- 3. In collaboration with the Philippine Rice Research Institute, the Centre for Appropriate Technology Development of the Ministry of Primary Industries of Fiji, and the Academy of Agricultural Sciences of the Democratic People's Republic of Korea, UNAPCAEM organized tailored training programmes on hybrid rice cultivation technologies from October through December 2010 in the three countries. The training, which varied from one week to one month long, was designed in response to member countries' demand to upgrade their research and seed production capacity for hybrid rice production. Country-specific technology consultations put emphasis on how to adapt the hybrid rice cultivation skills to local conditions and address participating countries' particular technology constraints in rice production. Experts were dispatched to participating countries to advise the local trainers and provide country-specific technological know-how. Intensive training on seed genetics, seed

production and cultivation technology was held with wide participation from research institutes, extension service providers, policymakers, farmers and representatives of the private sector. Altogether, nearly 70 local participants took part in the trainings. In the Philippines, a workshop was held to share experiences in how to forge effective public-private partnerships to promote agricultural technology transfer. Participating countries spoke highly of the value of the country-specific technology consultations in upgrading their research capacity regarding high-yielding rice varieties. They expressed a strong interest in participating in follow-up programmes and carrying out further cooperation with UNAPCAEM to improve food security and promote sustainable agriculture in their respective countries.

- UNAPCAEM implemented a project to build the capacity of agricultural technicians, extension workers, government officials and the private sector in Myanmar to address post-harvest losses in rice production through training on practical, on-farm post harvest technologies and introduction of suitable and locally adaptable machineries and good agricultural practices. A fact-finding mission was conducted by UNAPCAEM from 11 to 13 October 2010 to collect the most up-to-date information on constraints and challenges with post-harvest technologies in Myanmar through visits to research institutes, extension services and talks with government officials and private sector representatives. In collaboration with the Ministry of Agriculture and Irrigation of Myanmar, UNAPCAEM organized a training on post-harvest technology for rice production in Myanmar from 16 to 20 December 2010. A total of 50 technicians, engineers, extension workers and representatives of research institutes, the private sector and rice miller associations from across the country joined the week-long training. The training covered drying, storage, processing as well as harvesting technologies in rice production. The project enjoyed technical support from the Asian Institute of Technology and Jiangsu University in China. As a supplement to the training, a policy workshop was held on 21 December with participation from over 30 policymakers from various departments of the government. At the workshop, UNAPCAEM made a presentation to share the key findings and provided policy recommendations on how to mechanize the country's agricultural sector. Experts from UNAPCAEM also shared best practices and useful experiences in mechanization of rice production from neighbouring countries. UNAPCAEM also presented to the Ministry of Agriculture and Irrigation of Myanmar a proposal for a follow-up project to strengthen its agricultural machinery sector. The training manual on postharvest technologies in rice production farming systems was uploaded to the UNAPCAEM website (see http://www.unapcaem.org).
- 5. A strategic planning workshop was held in Putrajaya, Malaysia, on 29 and 30 November 2010, prior to the sixth session of the UNAPCAEM Technical Committee. The strategic planning workshop brought together 22 participants from 16 countries representing senior researchers, both former and current UNAPCAEM Technical Committee members, as well as outside professionals. The workshop reviewed the Centre's performance, analysed its current financial and human resource situation, discussed ways to take the Centre's programme of work forward and identified core areas for future work. The workshop produced a draft five-year strategic plan which was endorsed by the UNAPCAEM Governing Council at its sixth session. The five-year strategic plan mapped out a concrete work plan to

revitalize the Centre as an effective platform for capacity-building, technology transfer and information networking.

- 6. UNAPCAEM strengthened the participatory planning of member countries, particularly through the Technical Committee members and the national designated institutes. Surveys were conducted prior to project design to gauge the need of member countries and ensure the demand-driven nature of projects. National designated institutes also provided logistical and in-kind support to project implementation.
- 7. UNAPCAEM improved its website to make it more user-friendly, highlighting the key activities of the Centre. The web page established for Technical Committee and Governing Council members in 2009 was upgraded and populated with new information about meetings and events.

# II. Summary of the programme of work for 2011

- In 2011, technical cooperation activities of UNAPCAEM will be guided by both the approved five-year strategic plan and the programmatic approach introduced by ESCAP for 2011-2013, spearheaded by the Trade and Investment Division, the backstopping division of UNAPCAEM in ESCAP. The programmatic approach is designed to develop long-term and strategic programmes by forging synergies among divisions and regional institutions of ESCAP and consolidating financial resources. Specifically, UNAPCAEM technical assistance activities for 2011 will be incorporated in one of the umbrella projects developed for the trade and investment subprogramme, under the theme of creating an enabling environment for competitive sustainable and inclusive enterprises. This umbrella project is expected to (a) increase national capacity to enhance the competitiveness of SMEs and agro-based enterprises through, among other things, the transfer development of environmentally sound and energy-efficient agricultural and non-agricultural technologies; (b) to support their effective participation in regional markets and value chains; and (c) to increase capacity in member States to promote and facilitate more inclusive and sustainable business practices in the agricultural and in other sectors. The modality of technical programmes will include training, best practice and knowledge sharing, research and policy workshops.
- 9. Resource mobilization to ensure the viability of the Centre and adequate funding for project development will be a key area of work for the Centre in 2011. Close consultations and frequent communication with the national designated institutes and the Technical Committee members will be conducted to ensure that the priorities of member countries as regards sustainable agriculture and food security are adequately addressed, and to keep them informed on the progress of work and solicit their support. Financial resources for technical cooperation programmes will come primarily from donor countries and a limited amount from the regular budget of the United Nations. Seed money for capacity-building projects from member countries is worth considering as leverage for larger financial contributions from potential donors from outside the region.
- 10. In 2011, UNAPCAEM will implement the remaining part of step II and step III of the hybrid rice technology consultation project. Country-specific technology consultations on hybrid rice technology for food security will be conducted in Bangladesh, Myanmar and Nepal. A regional workshop on promoting sustainable agricultural technologies will be held to

share knowledge, best practices and address the institutional and technological constraints in adopting such technologies. The regional workshop will also summarize useful experiences of participating countries in developing high-yielding hybrid rice technologies.

- 11. A regional expert group meeting on the testing of agricultural machinery will be organized as a follow-up to the study on agricultural mechanization, which included a chapter discussing the potential structure of an Asian and Pacific network for testing agricultural machinery and the next steps for the establishment of such a network.
- 12. Efforts will be made to strengthen synergies with other regional institutions of ESCAP to promote food security and sustainable agriculture in the Asia-Pacific region and explore collaborative programmes in this regard.

## III. Administrative and financial issues

- 13. A new Senior Economic Affairs Officer and Head of the Centre reported for duty on 27 April 2010. Two interns and one United Nations volunteer were recruited to strengthen the human resources of the Centre in 2010.
- 14. In 2010, the Centre received voluntary contributions from Bangladesh, China, India, Indonesia, Iran (Islamic Republic of), Philippines, Sri Lanka, Thailand and Viet Nam (see annex I).

# IV. Issues for consideration by the Commission

15. The Commission may wish to encourage members and associate members to provide UNAPCAEM with support in terms of increased financial contributions and expertise. The Commission may also wish to discuss the potential establishment of a threshold for minimum contributions from member countries with a view to ensuring the viability of the Centre in the long term.

# Annex I

# **Contributions in 2010**

# Global Fund for Institutional Support - UNAPCAEM Funds received as of 31 December 2010

(United States dollars)

Country/area	Funds received in 2010		
Bangladesh	3 000.00		
China	19 980.00		
India	15 000.00		
Indonesia	29 982.00		
Iran (Islamic Republic of)	8 820.44		
Philippines	10 920.38		
Sri Lanka	5 000.00		
Thailand	30 000.00		
Viet Nam	3 000.00		
Total	125 702.82		

Annex II

Statement of accounts

Institutional support and technical cooperation projects as of 31 December 2010

(United States dollars)

	Donor	Balance carried over 31 Dec. 2009	Contributions (2010)	Expenditure (2010)	Interest earned (2010)	Interest Returned to Donor (2010)	Balance at 31 Dec. 2010
Institutional support	Institutional support-JCE	459 578.39	125 702.82	64 579.92	11 406.34	0.00	532 107.63
	Institutional support- Government of China	2 626 006.72	0.00	301 259.53	63 351.38	0.00	2 388 098.57
S	Sub-total	3 085 585.11	125 702.82	365 839.45	74 757.72	0.00	2 920 206.20
Technical cooperation projects	ESCAP-China Cooperation Fund	259 252.30	0.00	143 801.97	0.00	0.00	115 450.33
	Government of Spain/MDG-F	69 932.31	0.00	36 316.93	922.28	3 144.86	31 392.80
	Regular Programme of Technical Cooperation (section 22) <sup>a</sup>	0.00	26 900.00	25 316.59	0.00	0.00	1 583.41
Subtotal		329 184.61	26 900.00	205 435.49	922.28	3 144.86	148 426.54
Total		3 414 769.72	152 602.82	571 274.94	75 680.00	3 144.86	3 068 632.74

<sup>&</sup>lt;sup>a</sup> Fund balance under the Regular Programme of Technical Cooperation cannot be carried forward to the next biennium (2012-2013).

#### **Annex III**

## **Report of the Governing Council on its sixth session**

## **Executive summary**

- 1. The Governing Council of the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM) reviewed the report on the work of UNAPCAEM in 2010, as well as the administrative and financial status of the Centre, and endorsed the proposed work plan for 2011. The Council endorsed the report of the Technical Committee of UNAPCAEM on its sixth session, held in Putrajaya Malaysia, on 2 December 2010. The Council also reviewed the draft annual report of UNAPCAEM to the Commission at its sixty-seventh session.
- 2. The Governing Council endorsed the draft strategic five-year plan developed jointly with Technical Committee members during the strategic planning workshop held on 29 and 30 November 2010 prior to the Technical Committee session. The Council discussed resource mobilization and communication issues in particular.
- 3. The Governing Council recommended that ESCAP and UNAPCAEM intensify resource mobilization efforts through engagement with member countries and other stakeholders.
- 4. The Governing Council emphasized that project development at UNAPCAEM should reflect the mandate and comparative advantage of the Centre with a strong focus on agricultural engineering and mechanization.
- 5. The Governing Council thanked member countries for their financial contributions and technical inputs and the host Government, China, in particular, for the generous institutional support provided. The Council endorsed the Technical Committee recommendation that member countries consider a threshold contribution to ensure the viability of the Centre in the long term.
- 6. The Governing Council emphasized that synergy should be forged with various stakeholders, including relevant United Nations agencies, regional institutions of ESCAP, in particular the Centre for the Alleviation of Poverty through Sustainable Agriculture and the Asian and Pacific Centre for Transfer of Technology, and the private sector in project development and implementation.

## I. Organization of the meeting

### A. Date and venue

7. The sixth session of the Governing Council of UNAPCAEM was held in Bangkok on 10 February 2011.

#### **B.** Opening session

8. The Director of the Trade and Investment Division of ESCAP delivered an opening statement. He thanked member countries for their strong commitment to the Centre and the importance that member countries

attached to the work of UNAPCAEM. He thanked the Government of Thailand, and the Ministry of Agriculture and Cooperatives in particular, for hosting the meeting. He noted the importance of agricultural engineering and machinery for increasing agricultural productivity in the region against the background of limited natural resources, increasing populations and the effect of climate change. He also noted that the Centre had tremendous potential to become a centre of excellence in the area of transfer of innovative agro-engineering technologies through South-South cooperation.

### C. Attendance

9. Representatives of China, India, Indonesia, Malaysia, Thailand and Viet Nam attended the session. Therefore, a quorum was achieved.

#### **D.** Election of officers

10. The Governing Council elected the following officers:

Chairperson: Mr. Madan Mohan Pandey (India)
Vice Chair/Rapporteur: Mr. Mohd. Zainal bin Ismail (Malaysia).

## E. Adoption of the agenda

- 11. The Governing Council adopted the following agenda:
  - 1. Opening of the session.
  - 2. Election of officers.
  - 3. Adoption of the agenda.
  - 4. Report on the activities of UNAPCAEM in 2010 and financial status as of December 2010
  - 5. Report of the Technical Committee on its sixth session and consideration of the draft strategic plan for UNAPCAEM
  - 6. Proposed work plan for 2011, programme of work for 2012-2013 and resource mobilization issues for 2011-2013.
  - 7. Review of the draft annual report of UNAPCAEM to the Commission.
  - 8. Date and venue of the seventh session of the Council.
  - 9. Other matters.
  - 10. Adoption of the report.

## II. Summary of discussions and recommendations

# A. Report on the activities of UNAPCAEM in 2010 and financial status as of December 2010

- 12. The Council was informed that, in 2010, the following activities had been conducted:
- (a) International Seminar on the Application of the Clean Development Mechanism Facility in the Agricultural Sector, held in Beijing on 10 and 11 May 2010;
- (b) Tailored training programmes on cultivation technologies of high-yielding rice varieties in Fiji, the Philippines and the Democratic People's Republic of Korea from October through December 2010;
- (c) A strategic planning workshop and the sixth session of the Technical Committee had been held in Putrajaya, Malaysia, on 29 and 30 November and 2 December 2010, respectively;
- (d) A training and policy workshop on harvesting and post-harvest technologies for rice production in Myanmar had been held from 16 to 20 December 2010, and a training manual had been uploaded on the website;
  - (e) A draft five-year strategic plan had been prepared;
  - (f) UNAPCAEM made its web site more user-friendly.
- 13. The Governing Council commended UNAPCAEM for its achievements in 2010 and endorsed the report on activities undertaken during the year. It emphasized that the focus of the Centre should remain agricultural engineering and machinery. It recommended that the scope of work of UNAPCAEM should cover the following areas: (a) agricultural machinery; (b) land and water management; (c) agro-industrial development; (d) application of information and communications technology in the agricultural sector; (e) post-harvest technology and food chain quality control; (f) bio-resources, including biomass and bio-energy; and (g) climate-resilient technology.
- 14. The Governing Council emphasized the importance of the proposed establishment of the Asia-Pacific network for testing agricultural machinery for promoting intraregional trade in agricultural machinery and the use of environmentally friendly agricultural machinery. It expressed support for and an interest in efforts that would lead to the establishment of such a network and suggested that the network be developed into a flagship project to showcase the distinct role and niche of UNAPCAEM.
- 15. The Governing Council recommended partnerships be established with the private sector to solicit technical inputs and financial resources for project development.
- 16. The Governing Council discussed extensively the functions and structure of the Technical Committee and Governing Council as well as their annual sessions. It strongly recommended re-coupling the sessions of the Council and the Technical Committee. The Council also debated the advantages and disadvantages of optimizing the structure of its own

sessions as well as that of the Technical Committee sessions. It recommended the strengthening of the role of the Technical Committee in providing technical inputs for the research and projects of the Centre. Council members were briefed about the ongoing ESCAP process aimed at streamlining the governing structure of all the regional institutions in the context of the midterm review of the conference structure of the Commission, and were informed that feedback from member countries was considered very important in the process.

17. The Governing Council thanked member countries for their valuable technical inputs and financial contributions.

# B. Report of the Technical Committee on its sixth session and consideration of the draft strategic plan for UNAPCAEM

- 18. The strategic planning workshop and the sixth session of the Technical Committee were held in Putrajaya, Malaysia, on 29 and 30 November and 2 December 2010, respectively.
- 19. The Governing Council endorsed the report of the Technical Committee on its sixth session and the draft strategic plan. The Council suggested that the strategic plan be widely circulated among member countries to increase the visibility of the Centre and to promote joint implementation of projects for wider regional impact. The Council requested that UNAPCAEM intensify communication with member countries, relevant international organizations and the private sector, in particular through regular contact via newsletters, and encouraged member countries to provide inputs. The Council emphasized that, in order to solicit financial contributions from member countries, communication should highlight the benefits that they could derive from the Centre.

# C. Proposed work plan for 2011, the programme of work for 2012-2013 and resource mobilization issues for 2011-2013

- 20. The Governing Council was informed that, in 2011, the UNAPCAEM programme of work would focus on the following areas:
- (a) A pilot training project on the testing of agricultural machinery to promote standard technologies for the testing of agricultural machinery;
- (b) A regional seminar on promoting sustainable agricultural engineering technologies for food security (phase III of the hybrid rice project);
- (c) Training workshops on high-yielding rice production and cultivation technologies in Bangladesh, Myanmar and Nepal;
- (d) Implementing the resource mobilization strategy and enhancing communication with member countries and other stakeholders.

# D. Review of the draft annual report of UNAPCAEM to the Commission

21. The Governing Council reviewed the draft report of UNAPCAEM to the Commission and suggested that revisions be made on the basis of the Council's deliberations and the evolving situation before the convening of the sixty-seventh session of the Commission, in May 2011.

#### E. Date and venue of the seventh session of the Council

22. It was decided that a final decision would be made after consultations with member countries.

### F. Other matters

23. The Director of the Trade and Investment Division of ESCAP briefed the Governing Council on the upcoming session of the Committee on Trade and Investment, which was scheduled to be held in July 2011, and the role of the Centre in the session. He informed the Council about the ongoing efforts of ESCAP to strengthen its regional institutions.

## **G.** Adoption of report

24. The Governing Council adopted the present report on 10 February 2011.

12