

**Economic and Social Council**

Distr.: General
2 September 2015

Original: English

Economic and Social Commission for Asia and the Pacific
Committee on Trade and Investment**Fourth session**

Bangkok, 4-6 November 2015

Item 6 (b) of the provisional agenda*

Reports on activities of the regional institutions:**Centre for Sustainable Agricultural Mechanization****Report on activities of the Centre for Sustainable
Agricultural Mechanization****Note by the secretariat***Summary*

The present document contains a review of the activities of the Centre for Sustainable Agricultural Mechanization since the third session of the Committee on Trade and Investment. The document also contains highlights of the developments resulting from member States' requests, which actively contribute to the Centre's vision. Following the name change from the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery and the focal point transfer to the Ministry of Agriculture of China in 2013, the Centre undertook a strategic review process and recast its strategic functions as a result of extensive consultations with stakeholders. In line with its new strategic functions, a new set of programmatic initiatives and projects has been formulated and implemented. The successful implementation of these initiatives has shaped the core business and flagship projects of the Centre and enhanced its impact and visibility among stakeholders; more importantly, it has showcased the Centre's potential for contributing to food security and the sustainable development of agriculture and of rural areas through sustainable agricultural mechanization in the Asia-Pacific region. The Centre's major accomplishments in 2014 and 2015 and its key areas of work for 2016-2017 are also identified and an invitation to the member States to increase support and build extensive partnerships is issued.

* E/ESCAP/CTI(4)/L.1.

Contents

	<i>Page</i>
I. Introduction	2
II. Activities undertaken by the Centre during the period 2014-2015	3
III. Major accomplishments and proposed future key areas of work for 2016-2017	6
A. Core business and flagship projects	6
B. Boosting impact and visibility	6
C. Expanding partnerships and funding sources.....	7
D. Improved internal management and resource allocation	7
IV. Issues for consideration by the Committee	8

I. Introduction

1. Despite remarkable progress in reducing the prevalence of undernourishment in Asia and the Pacific during the cycle of the Millennium Development Goals, in 2015 the region is still home to two thirds of the world's hungry people. The efforts and ability of the region to provide sufficient food for all and eliminate rural poverty sustainably are further complicated by socioeconomic dynamics, such as population growth, urbanization and industrialization, climate change, and resource and environment constraints such as water scarcity, land degradation and pollution. This is reflected in the fact that the first two sustainable development goals proposed by the Open Working Group on Sustainable Development Goals are directed at addressing the dual challenges of poverty and hunger; proposed goal 1 is to end poverty in all its forms everywhere, and proposed goal 2 is to end hunger, achieve food security and improved nutrition and promote sustainable agriculture. Several other proposed sustainable development goals, in particular goals 6, 8, 10, 12, 14 and 15, are also relevant to agricultural and rural development.

2. The role of agricultural technologies in general, and mechanization specifically, is crucial to sustainable intensification of agricultural production, improved rural income and livelihoods, sustainable and efficient use and stewardship of natural resources, protection of the environment and resilience to climate change and other shocks. Sustainable agricultural mechanization has much to contribute to sustainable agriculture and rural development, including by increasing productivity and production, reducing human drudgery, optimizing resource and input use, addressing rural labour shortfalls, cutting food loss and waste, providing employment and business opportunities, and creating efficient food value chains. It embraces and contributes to all three pillars of sustainable development and their integration in the fields of agriculture and rural development.

3. The Economic and Social Commission for Asia and the Pacific (ESCAP), through its Centre for Sustainable Agricultural Mechanization, is making every effort to promote sustainable agricultural mechanization across the region in support of sustainable agriculture and rural development, especially among the developing member countries. The Centre's mandate has been re-strategized to serve ESCAP members by facilitating knowledge management and information sharing, promoting capacity-building, and fostering regional cooperation and networking in the fields of agricultural engineering and machinery.

II. Activities undertaken by the Centre during the period 2014-2015

4. Since the third session of the Committee on Trade and Investment, which was held in Bangkok from 20 to 22 November 2013, the implementation of the Centre's re-defined strategic functions has clarified its scope of work and its focus areas. On the one hand, these functions are better aligned with the region's actual needs for agricultural mechanization, and on the other, they also fit more closely with the Centre's mandate as a United Nations regional institution, while striking a balance between its current capacities and resources and its potential for growth, while leaving room for flexibility in the future.

5. The Centre has revamped its programme of work since 2013 and formulated and carried out a series of new projects and initiatives. The successful implementation of these initiatives has shaped the core business and flagship projects of the Centre and enhanced its impact and visibility among stakeholders; more importantly, it has showcased the Centre's potential for contributing to food security and the sustainable development of agriculture and of rural areas through sustainable agricultural mechanization in the region. These initiatives are discussed in more depth below.

6. Building upon the success of the First Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific, in Qingdao, China, in 2013, greater impact and visibility was achieved by organizing the Second Regional Forum, in Indonesia in September 2014, in collaboration with the Indonesian Ministry of Agriculture and the Food and Agriculture Organization of the United Nations (FAO). The Second Regional Forum focused on creating an enabling environment for custom hiring of agricultural machinery and attracted the participation of a wider range of stakeholders, including representatives from Governments and public agencies, research and development (R&D) institutions, international organizations, non-governmental organizations and industry and farmers as well as public and private sector service providers. As an integral part of the Forum, a mini machinery exhibition and on-site demonstration were staged in the Indonesian Centre for Agricultural Engineering, Research and Development with a rice transplanter, sugarcane harvester, rice miller, cassava slicing machine and a juice extractor.

7. Following the success of the Second Regional Forum, the Government of Myanmar decided to carry out capacity-building activities on custom hiring of agricultural machinery under an ESCAP initiative, with the Centre as one of the implementers. As a result of the Forum, participants from Nepal found a partner in India to provide training on custom hiring for their policymakers and service providers. The 2015 training was funded by the United States Agency for International Development and the International Food Policy Research Institute. The Forum has become one of the Centre's important annual events and provides a recognized platform for strategic and policy dialogues and engagement with a full spectrum of stakeholders. The third Forum will be held in the Philippines in December 2015 with a theme on human resource development of agricultural mechanization.

8. The Asian and Pacific Network for Testing of Agricultural Machinery aims to harmonize regional testing standards for agricultural machinery, foster mutual recognition of test results and strengthen the testing capacity of member countries, with a view to improving the safety and quality of agricultural machinery used, manufactured and traded in the region.

Following its launch in late 2013, its first annual meeting was held in Beijing from 16 to 19 September 2014, in parallel with the eighteenth World Congress of the International Commission of Agricultural and Biosystems Engineering. Participants from 19 member States of ESCAP attended, as well as representatives from relevant United Nations agencies and international organizations and from manufacturers, industry associations and farmers' organizations in the region. Member countries reviewed and approved the workplan of the Network for 2014-2015 and reached consensus on issues related to its operational structure.

9. After the first annual meeting, the Technical Working Group of the Network was established, composed of 13 members from 11 countries, to kick off the Network's standard-setting work in February 2015. From 4 to 7 May 2015, the first meeting of the Technical Working Group was held in Indonesia, with the support of the Indonesian Centre for Agricultural Engineering, Research and Development. Draft codes for power tillers and misters-cum-dusters were developed at the meeting by drawing upon relevant standards adopted by international organizations such as the International Organization for Standardization, the Organization for Economic Cooperation and Development and FAO, as well as codes from Asian countries. Subsequently, from 23 to 27 June 2015, the first train-the-trainers programme on the Network's test codes was successfully delivered in Nanjing, China, in collaboration with the China Agricultural Machinery Testing Centre of the Ministry of Agriculture. Twenty testing engineers from testing centres and agricultural mechanization research institutes from 11 member States of ESCAP attended.

10. In the last few months of 2015, participating countries are in the process of conducting test runs of the Network codes and generating uniform Network test reports for technical review. The first set of test codes on power tillers and powered knapsack misters-cum-dusters and test reports will then be submitted to the second annual meeting of the Network for review and adoption. The second annual meeting will be held in India in December 2015.

11. The Regional Council of Agricultural Machinery Associations in Asia and the Pacific was established at a round table of national agricultural machinery associations in Asia and the Pacific held in October 2014. The functions of the Council are to: (a) share information on potential business and investment opportunities; (b) enhance the capacities of agricultural machinery associations to provide better services to their members; (c) voice the needs of agricultural machinery associations and their members and act as the intermediary connecting the business community and governments; and (d) promote regional cooperation among private-sector actors. The Centre was asked to serve as the secretariat for the Council. All associations participating in the round table became founding members of the Council. China was elected Chair and India Vice-Chair of the Council for 2015.

12. In 2015, the initial workplan of the Council was drafted and circulated among members and the website was developed. From 27 July to 4 August 2015, a training and study tour for agricultural machinery distributors in Asia and the Pacific was organized in China, under the framework of the Council, by the Centre in collaboration with the Centre of International Cooperation Service of the Ministry of Agriculture of China and the China Agricultural Machinery Distribution Association. The training programme was attended by 17 participants from eight countries. The first annual members' meeting of the Council will be held in Qingdao, China, from 26 to 28 October 2015 during the 2015 China International Agricultural Machinery Exhibition.

13. In November 2014, the Centre convened a regional workshop to launch a regional database for agricultural mechanization in Asia and the Pacific, in Siem Reap, Cambodia. The main objective of the regional database project is to increase the quantity and quality of data and information collected, compiled and shared among member countries by providing a regional database framework and strengthening institutional and human resource capacities.

14. As requested by member countries, drafts of the terms of reference, the workplan and the template for a core set of data for the regional database were developed by the Centre and circulated to the main stakeholders. They will be discussed and endorsed at the 11th meeting of the Centre's Technical Committee in December 2015 in the Philippines.

15. The Sustainable Agricultural Mechanization Strategy, a joint initiative of the FAO Regional Office for Asia and the Pacific and the Centre, takes a holistic approach to addressing the sustainable use of mechanization across the entire agrifood chain, from land preparation and crop husbandry to harvesting and post-harvest handling and processing as well as consumer protections, such as food safety issues. It forms a part of an enabling environment for the effective and sustainable use of mechanization in the region. The High-level Multi-Stakeholder Consultation on a Sustainable Agricultural Mechanization Strategy in the Asian and Pacific Region was held in Bangkok on 26 and 27 June 2014, and was organized jointly by the Centre and the FAO Regional Office for Asia and the Pacific, with the participation of 21 countries from Asia and the Pacific. At present, consultations are being conducted among member countries on a proposed web-based network, which would be named the sustainable mechanization across agrifood chains network for the Asian and Pacific region.

16. As an integral part of the Commission's capacity-building programme to assist member countries in enhancing their institutional and human capacity to achieve the sustainable development goals, the Centre is making ever greater efforts to leverage funds and in-kind support and expertise from various partners to design and deliver capacity-building activities in response to the needs of member countries. The Centre has received positive feedback from stakeholders for recent and ongoing capacity-building activities.

17. The Centre held a training programme on agricultural mechanization for the Democratic People's Republic of Korea, in Beijing from 1 to 21 April 2015, in collaboration with the China Agricultural University and with financial support from ESCAP. Tailored to the specific needs of the Democratic People's Republic of Korea, the training programme aimed to enhance the awareness, knowledge and capacity of the participants in promoting agricultural mechanization development in that country. The training programme included lectures on strategies, policies and technical aspects of agricultural mechanization. Field trips and visits were organized to reinforce and enrich the learning experience, including a tour to an agricultural machinery exposition and visits to agricultural manufacturers. In addition to achieving all of its objectives, the training programme also enhanced mutual understanding between the Democratic People's Republic of Korea and the Centre, which established a good foundation for future cooperation.

18. The Centre worked with the Centre for Alleviation of Poverty through Sustainable Agriculture and the Asian and Pacific Centre for Transfer of Technology to implement a project of the Livelihoods and Food Security Trust Fund to improve livelihoods in the dry zone of Myanmar, which was launched in Yangon, Myanmar on 5 May 2015. The project is funded through

the Trust Fund and managed by the United Nations Office for Project Services and aims to support integrated socioeconomic development in the dry zone of Myanmar in the context of inclusive and sustainable development with special emphasis on livelihood improvement and food security. The Centre is working interdependently on the thematic areas of custom hiring of agricultural machinery and is developing case studies, designing and implementing training programmes and formulating policy briefings. On 27 August 2015, the Centre for Sustainable Agricultural Mechanization, the Centre for Alleviation of Poverty through Sustainable Agriculture and the Asian and Pacific Centre for Transfer of Technology jointly organized the orientation meeting for consultants developing case studies for the project, which will serve as a basis for the development of the training manual. The first training course is expected to be held during the last week of November 2015.

19. The Centre's quarterly e-publications, namely its newsletters and policy briefs, provided a wide range of subscribers with timely and comprehensive updates and analysis on regional agricultural mechanization and other related topics. These publications have been an effective and efficient method of facilitating communications and linkages between the Centre and its member countries and other stakeholders.

20. During this reporting cycle, the Centre is facilitating the consultation between ESCAP and the Government of China, in particular its Ministry of Foreign Affairs, Ministry of Finance and Ministry of Agriculture, on the extension of the headquarters agreement for replenishing the Centre's trust fund.

III. Major accomplishments and proposed future key areas of work for 2016-2017

21. Building on the efforts of past years, the Centre has seen marked improvement in the quantity and quality of its programme delivery as well as in its own capacity, particularly in the areas highlighted below.

A. Core business and flagship projects

22. Given the current constraints on financial and human resources, visibility and impact, the Centre prioritized its core business and flagship projects throughout the project design and implementation process. With the implementation of the above-mentioned programmes and projects, the Centre's core business and projects has taken a distinct shape and is increasingly being recognized by stakeholders.

B. Boosting impact and visibility

23. The implementation of the activities and events designed in alignment with its core business has raised the Centre's profile and expanded its impact among stakeholders, such as member States and international organizations, resulting in significantly more and higher-level participation in its work. Member countries and other relevant organizations are more open than before to collaborating and partnering with the Centre. For instance, a number of countries, such as Bangladesh, India, Indonesia, Nepal and the Philippines, offered in 2014 to co-organize and host the Centre's events and activities in 2015. International organizations and universities and some of the research centres affiliated to CGIAR expressed their interest in joining forces with the Centre.

C. Expanding partnerships and funding sources

24. The Centre has also achieved noteworthy success in consolidating and expanding its partnerships and funding sources by (a) strengthening communication and cooperation with relevant Government agencies of the host country and Governments of other member States; (b) establishing and fostering partnerships with FAO and other international organizations; (c) working more closely with universities and R&D institutions; and (d) cultivating creative and mutually beneficial collaboration with the private sector.

25. Some of the additional funds and in-kind support that the Centre has received since 2013 include (a) 800,000 Chinese yuan (RMB) (\$130,000) allocated by the Ministry of Agriculture of China from its special funds for international cooperation; (b) \$300,000 from the Committee Encouraging Corporate Philanthropy to fund the framework project on establishing regional cooperation mechanisms and platforms for agricultural mechanization in Asia and the Pacific; (c) more than 600,000 Chinese yuan (RMB) (\$100,000) in in-kind support from three Chinese associations for the First Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific and the round table of national agricultural machinery associations; (d) \$70,000 from ESCAP for a training programme for the Democratic People's Republic of Korea; and (e) \$100,000 for the farm mechanization components of the Livelihoods and Food Security Trust Fund project.

D. Improved internal management and resource allocation

26. The internal management measures taken by the Centre have also proved effective and useful in improving its management of human, financial and material resources and optimizing staff/time deployment and fund use efficiency, thus adding money-for-value to the Centre's business operations.

27. Building upon its current accomplishments and the achievement of its strategic functions, the Centre has identified the following key areas of work for the period 2016-2017:

(a) Implementing existing initiatives and activities in a high quality manner and expanding their influence, namely, the Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific, the Asian and Pacific Network for Testing of Agricultural Machinery, the Regional Council of Agricultural Machinery Associations in Asia and the Pacific, the Asia-Pacific regional database on agricultural mechanization, the Sustainable Agricultural Mechanization Strategy, and carrying out capacity-building and training activities, and research and analytical work;

(b) Facilitating the consultations between ESCAP and the Government of China to secure the extension of host-country funding;

(c) Establishing and consolidating concrete partnerships with the key stakeholders in the field of agricultural mechanization in the region, including Governments, academic and research institutions, regional and international organizations, associations, non-governmental organizations and the private sector;

(d) Given the increasing importance of South-South cooperation in the Asia-Pacific region, the Centre will make efforts to tap into existing international and regional South-South cooperation mechanisms to promote such cooperation on sustainable agricultural mechanization, sustainable

agriculture, agribusiness development and other related areas outlined in global and regional initiatives.

IV. Issues for consideration by the Committee

28. The Committee is invited to consider the current and proposed core programmes of the Centre, in particular the Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific, the Asian and Pacific Network for Testing of Agricultural Machinery, the Regional Council of Agricultural Machinery Associations in Asia and the Pacific and the Asia-Pacific regional database on agricultural mechanization, and to make recommendations for their future development.

29. The Committee is also invited to consider the following issues in relation to the operation and funding of the Centre:

(a) In view of its renewed mandate and the pressing need in member countries to modernize their agricultural sectors so as to increase food productivity and build resilience against climate change – together with its increasing operational costs – the Centre encourages member States to augment their voluntary contributions in line with the recommended guidelines, and in consultation with members of the Centre's Governing Council, so that the Centre can better tailor its technical assistance programmes to the needs of its members;

(b) While strengthening its efforts to solicit wide support from various stakeholders, the Centre is keen to explore new sources of funding to bolster its technical and financial situation. The aim is to explore efficient and effective public and private partnerships by harnessing the resources of the private sector, non-governmental organizations and specialized agencies. Suitable guidelines for this could be developed in consultation with ESCAP;

(c) With limited in-house expertise and an expanded mandate, and in order to increase member States' ownership of programme activities, it is imperative for the Centre to strengthen its human resources. The Centre seeks the active support of member States in implementing various options, such as secondment of experts from member countries at no cost to the Centre and the placement of experts from the corporate sector on a pro bono basis.
