



Rewsletter

2nd & 3rd Issues 2014



1. 2nd Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific was held in Serpong, Indonesia

The 2nd Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific - Enabling Environment for Custom Hiring of Agricultural Machinery was held on 9-11 September 2014 in Serpong, Indonesia.

Enabling Environment for Custom Hiring of Agricultural Machinery was the central topic of this forum hosted by the Centre for Sustainable Agriculture Mechanization (CSAM) in collaboration with the Indonesian Agency for Agricultural Research and Development (IAARD) and FAO's Regional Office for Asia and the Pacific, in parallel with the International Forum on Agricultural and Bio-System Engineering 2014 with the support of the CECP funding.

Dr. Suswono, Minister of Agriculture in Indonesia, highlighted in his opening remarks that "agricultural mechanization is becoming one of the important factors and plays strategic role in Indonesia's agricultural development, as well as in other Asian-Pacific countries. Mr. Marc Proksch, Chief of Business and Development Section, Trade and Investment Division of UNESCAP, called for actions to the present participants to make a difference either as government official, academic, or practitioner within their capacity based on the improved understanding reached at Forum. Country representatives expressed their determination and specific plans to move the discussion forward to concrete results.

As an integral part of the Forum, a mini machinery exhibition and on-site demonstrations were also staged on in the Indonesian Centre for Agricultural Engineering Research and Development (ICAERD).



2. First Annual Meeting of the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) Laid the Groundwork for Harmonizing Regional Testing Codes and Procedures

The 1st Annual Meeting of the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) was held on 16-19 September in Beijing, China, in parallel with the 18th World Congress of CIGR and in collaboration with China Agricultural Machinery Testing Centre of the Ministry of Agriculture.

Participants from 19 member States of UNESCAP, i.e. Bangladesh, China, Cambodia, France, Fiji, India, Indonesia, Japan, Malaysia, Mongolia, Nepal, Pakistan, Papua New Guinea, Republic of Korea, Russia, Sri Lanka, Thailand, the Philippines, Viet Nam, as well as representatives from relevant UN agencies and international organizations including ESCAP, FAO, OECD, UNIDO and ENAMA/ENTAM, and representatives of manufacturers, industry associations and farmers' organizations across the Asia-Pacific attended the meeting.

Mr. LI Weiguo, Director-General of the Department of Agricultural Mechanization of the Ministry of Agriculture, Mr. LIU Min, Director-General of China Agricultural Machinery Testing Centre of the Ministry of Agriculture, Dr. Ravi Ratnayake, Director of Trade and Investment Division of ESCAP, and Ms. Ms. Ismal Kumudini, Joint Secretary of the Ministry of Agriculture of India, addressed the opening of the inaugural session.

Country representatives briefed the meeting on the current status of agricultural machinery testing in their respective countries and stressed the importance of testing in promoting sustainable agricultural mechanization. They further highlighted the need to make ANTAM operational so as to facilitate harmonization of test codes and procedures across the region, and assist the countries in raising the capacity of agricultural machinery testing and the quality and performance of farm machinery and equipment produced, traded and used in the region.

Member countries reviewed and approved work plan of ANTAM for 2014-2015, and reached consensus on issues related to the operational structure of ANTAM. China and India were elected Chair and Vice-Chair of ANTAM for 2014-15, respectively, and China Agricultural Machinery Testing Centre was elected as the Lead Focal Point for the same period.

Member countries further agreed to nominate one or two experts for the Technical Working Group (TWG) of ANTAM by the end of October 2014, and test run on a voluntary basis the ANTAM codes and procedures for tractors and knapsack sprayers to be developed by the TWG. The



draft ANTAM test reports would be submitted to the 2nd annual meeting of ANTAM for review.

It was agreed that the 2nd Annual Meeting of ANTAM would be held in the second half of 2015.





3. 18th World Congress of CIGR was held in Beijing, China



The 18th Congress of CIGR was held on 16-18 September in Beijing, China. There were nearly 2,000 experts, scholars and entrepreneurs in the fields of agricultural and bio-system engineering from around 50 countries and regions attending this conference.

This Congress remained faithful to the pattern established in past CIGR World Congresses, while incorporating innovative new elements to promote exchange and collaboration among agricultural engineers, and to offer a unique opportunity to present the results of research and to discuss important issues from a global perspective. The Congress was held to share common goal of advancing and

developing the field of Agricultural and Bio-systems Engineering, and to provide a discussion forum on how to promote scientific and technological innovations in agricultural engineering into the new millennium. The general topics included land and water engineering, farm buildings, equipment, structures and environment, equipment engineering for plants, energy in agriculture, management, ergonomics, and system engineering, postharvest technology and process engineering, information systems, agricultural machinery standardization, and Asian forum.

(Information provided on http://www.cigr2014.com/index.shtml, last seen on 13th-Oct.-2014)

4. CSAM Joined World Research Institute to Address Mechanization and Agricultural Transformation in Asia and Africa

CSAM joined the reviving global discussions on sustainable agricultural mechanization at a workshop on agricultural mechanization in Asia and Africa. The workshop was organized by the International Food Policy Research Institute (IFPRI) and National School of Development at Peking University in Beijing between 18 June and 19 June 2014.

Mr. ZHAO Bing, Head of CSAM, and Ms. Al Yuxin, Programme Officer of CSAM, attended the workshop, and joined the panel discussions on the role of public and the private sector in promoting agricultural mechanization development. Prof. Justin Yifu Lin, Honorary Dean of National School of Development and Dr. Shenggen Fan, Director General of IFPRI, opened the workshop by addressing the emerging challenges of agricultural



INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE sustainable solutions for ending hunger and poverty

mechanization development in Africa, and how Asian experience could contribute to global sustainable agricultural solutions. Representatives from Nepal, Bangladesh, Pakistan, China, Thailand, India, Ghana, Nigeria, and Ethiopia delivered presentations on agriculture mechanization in Asian and African countries.

In recent years, the role of agricultural mechanization in sustainable development and food security has gained increasing attention from policy-makers across developing countries in Asia. With emerging rural labor shortage and feminization of agricultural production as a result of rapid urbanization, and increasing demand for food and nutrients, there is a growing need to develop agricultural mechanization to address productivity gains and improve rural livelihoods. A holistic approach has to be adopted to address agricultural mechanization in a sustainable manner, particularly, its impact on the environment and women empowerment, through adoption of sustainable agricultural technologies and gender sensitive policies and initiatives.

The purpose of the workshop was to facilitate south-south knowledge exchange among national researchers, policy-makers, and private sector participants for lessons and experiences of mechanization and agricultural transformation in Asian and African countries. A particular focus is on the role of the private sector in supporting sustainable agricultural mechanization development for countries in which small-scale farmers dominate.

5. CSAM Presented an Asia-Pacific Perspective on Sustainable Agricultural Mechanization at Malaysian National Conference on Agricultural and Food Mechanization 2014



At the invitation of the Malaysian Agricultural Research and Development Institute (MARDI), focal point of CSAM in Malaysia, Ms. AI, Yuxin, Programme Officer of CSAM, attended the National Conference on Agricultural and Food Mechanization 2014 held in Kota Kinabalu, Sabah, Malaysia, on 20-22 May 2014. The theme of the conference was Sustainable Mechanized Agro-based Industries. It was one of the series of annual conference organized by MARDI.

Ms. Ai presented a key-note paper entitled "Sustainable Agricultural Mechanization: an Asia-Pacific Perspective". Ms. Ai summarized the characteristics of agricultural mechanization in the Asia-Pacific, and pointed out key constraints in adopting sustainable agricultural

mechanization and some enabling factors for its development. According to Ms. Ai, countries need to shift to more sustainable food production systems. This requires a new paradigm of intensification of agricultural production including introduction of mechanization technologies that address food production gains, environmental sustainability and gender equality. At present, CSAM is spearheading regional efforts in promoting inclusive and sustainable agricultural development by developing regional collaboration mechanisms such as Regional Forum on Sustainable Agricultural Mechanization, and the Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM) to address challenges of sustainable agricultural mechanization across the region.



6. CSAM and FAO-RAP Jointly Held a Multi-Stakeholder Consultation on Sustainable Agricultural Mechanization Strategies for the Asia-Pacific



CSAM and FAO Regional Office for Asia and the Pacific (FAO-RAP) jointly held the High-Level Multi-Stakeholder Consultation on Sustainable Agricultural Mechanization in Asia and the Pacific Region from 26 to 27 June 2014 in Bangkok, Thailand. The theme of the consultation was Sustainable Mechanization across the Food Chain.

Mr. ZHAO Bing, Head of CSAM, made a presentation on agricultural mechanization in Asia and the Pacific. Representatives from 21 countries in Asia and the Pacific, namely, Afghanistan, Bangladesh, Bhutan, Cambodia, China, DPR of Korea, India, Indonesia, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea,

Philippines, Singapore, Sri Lanka, Thailand, and Viet Nam, participated in the meeting including ministers of agriculture from Pakistan and Sri Lanka and vice ministers of agriculture from the Lao PDR and Maldives. The participants commended FAO and CSAM on convening the Consultation against the background of increasing attention by member countries to the issue of sustainable agricultural mechanization and its contribution to food security and rural livelihoods.

Discussions primarily focused on the proposed sustainable agricultural mechanization strategy (SAMS) paper. Member countries suggested an extensive list of technical issues surrounding SAMS that need to be further substantiated by consultants and expert consultations among member countries. The draft SAMS paper covered features of SAMS, regional priorities, institutional issues and thematic strategies and options.



7. Phase II of the 70th Session of the Economic and Social Commission for Asia and the Pacific: Regional Connectivity for Shared Prosperity was held from 4th - 8th August 2014 in Bangkok, Thailand

Phase II of 70th Session of the Economic and Social Commission for Asia and the Pacific: Regional Connectivity for Shared Prosperity was held from 4 to 8 August 2014 in Bangkok, Thailand.

The United Nations Economic and Social Commission for Asia and the Pacific is the main legislative organ of ESCAP and reports to the Economic and Social Council (ECOSOC) of the



United Nations. It provides a forum for all governments of the region to review and discuss economic and social issues and to strengthen regional cooperation. The Commission meets annually at the ministerial level to discuss and decide on important issues pertaining to inclusive and sustainable economic and social development in the region. During the 70th session, the Commission adopted an important resolution in the field of sustainable agriculture named "Promoting sustainable agricultural development in Asia and the Pacific through technology transfer".

The resolution calls upon members and associate members to make greater efforts on sustainable agricultural technologies, encourages them to develop partnerships to promote the technologies to farmers, and invites them to ensure that issues pertinent are given appropriate consideration. It also requests the Executive Secretary, in collaboration with United Nations bodies and specialized agencies, international financial institutions, development banks and donor countries to support knowledge- and information-sharing and capacity development for member States, to assist members and associate members to facilitate and expedite technology transfer, and to continue to encourage public-private partnerships and devise creative approaches.

Proceeding of Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific (26 - 27 October 2013, Qingdao, China)

The proceeding of the Forum consists of summary of presentations on sustainable agricultural mechanization strategies, agricultural mechanization status and trends of member countries, and the key findings. The E-version of the proceeding is available at: http://uncsam.org/publication/pub_RF13.htm.

CSAM Policy Brief (Issue No.2, June 2014): Trends of Agricultural

Mechanization in India by C. R. Mehta, Central Institute of Agricultural Engineering(1), N. S. Chandel, Central Institute of Agricultural Engineering(2), T. Senthilkumar, Central Institute of Agricultural Engineering(3), Kanchan K. Singh, Indian Council of Agricultural Research(4). The E-version of this Policy Brief is available at: http://un-csam.org/pub.asp.

CSAM Policy Brief (Issue No.3, September 2014): Status and Prospect of Agricultural Mechanization in

Cambodia by Chan Saruth, Department of Agricultural Engineering, Cambodia(1), Lor Lytour, Royal University of Agriculture, Cambodia(2), Chao Sinh, Department of Agricultural Engineering, Cambodia(3). The E-version of this Policy Brief is available at: http://un-csam.org/pub.asp.









1. CSAM focal point in China China Agricultural Machinery Testing Centre (CAMTC)



China Agricultural Machinery Testing Centre (CAMTC) was founded in 1951, which is the national-level supervisory agency for agricultural machinery testing & appraisal and testing certification. CAMTC is a public institution. CAMTC occupies the total floor area of 46104 square meters, of which the testing fields area is 29, 251 square meters and its total building area is 19810 square meters, of which the testing laboratories area is 3185 square meters. It has 102 staff and members including 12 senior engineers, 31 engineers and 34 engineers.

Ever since its establishment, CAMTC works on the testing, quality inspection & supervision, with an aim to promote the production, use and extension of the advanced and appropriate machinery, as well as the improvement of its performance and quality.

CAMTC has advanced facilities for agricultural machinery testing & appraisal, and well-equipped testing laboratories for tractor, engine, farm machinery & implement, water-saving irrigation and plant protection machinery, spare parts, as well as a tractor test ground and over 400 sets of domestic and imported equipments and facilities.

It can carry out the experiment, test and inspection of more than 80 kinds machines and spare parts in accordance with international standards, national standards and trade standards, such as tractors, internal combustion engine, combine harvester, field management machinery, post-harvest processing

machinery, farm and sideline products primary processing machinery, seed processing machinery, and animal husbandry & aquaculture breeding machinery.

CAMTC provides technical support for the government to the policy-making, along with high quality and efficient services for the manufacturers and customers of agricultural machinery.

The Scope of Responsibilities of CAMTC is as follows:

• Testing and Appraisal of Agricultural Machinery and Spare Parts;

• Official Testing of Tractor by OECD Standard Codes;

• Management of the Catalogues of

Agricultural Machinery Products Recommended by the Country;

Supervision on the Quality Complaints of Agricultural Machinery Products;

- Quality Investigation on Agricultural Machinery;
- Quality Certification of Agricultural Machinery Products;
- Qualification and Instruction on Agricultural Machinery Vocational Skill;
- Information Service of Agricultural Mechanization;
- Management of Standards Drawing and Revision Related to Agricultural Mechanization;
- Management of Agricultural Machinery Repairing and Maintenance;
- Instruction on the Operation and Team Construction for Agricultural Machinery Testing System;
- Service on Foreign Affairs and Economy Concerning Agricultural Mechanization.

CAMTC has the major following testing laboratories:

1. Engine testing laboratory

With 4 sets of electric eddy-current brake dynamometer of W series and E series from German Schenck Corporation, 1 set of W series dynamometer from FEVW Corporation, and 1 set of MEXA 7200D series emission analysis system from Japanese HORIBA Corporation, the laboratory can do the performance test, reliability test, durability test of the engine, and the PTO test of the tractor below 500 kW, and measure the contents of HC, NOx, CO in the emission of the exhaust gas.

2. Tractor testing laboratory

With apparatus and equipments which meet the requirements of OECD Standard Codes for the Official Testing of Agricultural and Forestry Tractors and national inspection standards, the laboratory can test the power, economic and operation performance data of the complete machine, like wheel tractor, caterpillar, walking tractor, transporter re-modelled from walking tractor, agricultural trailer and equipment for farmland fundamental construction and can also do the testing of single items such as gravity & height measurement, mass (weight) parameter, and rig test of static roll-over protection stability of agricultural machinery.

3. Testing laboratory for agricultural machinery and implements

With some advanced testing equipments such as seeding machine performance test stand (independent R&D equipments), rotation rate torque meters (independent R&D equipments), vibration analyzers, turning parameter testing instruments, braking performance testing instruments, oil consumption instruments, dust sampling instruments, etc., the laboratory can conduct agricultural machinery testing evaluations such as soil tillage preparation, planting fertilization, field management, harvesting, post-harvest treatment, etc.

4. Testing laboratory for material characteristics and spare parts

With some sophisticated equipments such as universal testing machines, xenon lamp temperature resistance proofing boxes, ozone ageing resistance boxes, handheld alloy analyzers, supersonic flaw detectors, common V-belt measuring equipment, etc., the laboratory can conduct mechanics performance testing of metal or non-metal materials, anti-aging testing of non-metal materials,



composition analysis of metal materials, fault detection, etc. and can do the test of spare parts such as V-belt for agricultural use.

5. Testing laboratory for water-saving irrigation and plant protection machinery With the advanced detection equipments, such as sprayability testing stand, liquid pump testing stand, laser particle spectrometers, super speed testing stand, sprinkler testing stand, Drip irrigation device performances testing stand, etc., the laboratory can conduct the testing appraisal of the products such as spraying machines (facilities), spraying machines, micro-irrigation equipments, etc.

(Information is provided by Mr. Chang Xiongbo of CAMTC)

2. Sub-Mission on Agricultural Mechanization (Twelfth Five-Year Plan) of Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India



The Sub-Mission on Agricultural Mechanization (Twelfth Five Year Plan) is a division-wise program of Department of Agriculture & Cooperation, Ministry of Agriculture, the Government of India. The Mission objectives are to increase the reach of farm mechanization to small and marginal farmers and regions where availability of farm power is low; promoting 'Custom Hiring Centres' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership; to create hubs for hi-tech & high value farm equipments; create awareness among stakeholders through demonstration and capacity

building activities; ensure performance testing and certification at designated testing centers located all over the country.

To achieve the above objectives, the Mission will adopt the following strategies:

(i) Conduct performance testing for various farm machineries and equipments at the four Farm Machinery Training and Testing Institutes (FMTTIs), designated State Agricultural Universities (SAUs) and ICAR institutions;

(ii) Promote farm mechanization among stakeholders by way of on-field and off-field training and demonstrations;

(iii) Provide financial assistance to farmers for procurement of farm machinery and implements;
(iv) Establish custom hiring centres of location and crop specific farm machinery and implements;
(v) Provide financial assistance to small and



marginal farmers for hiring machinery and implements in low mechanized regions.

The mission has 8 components:

 Promotion and Strengthening of Agricultural Mechanization through Training, Testing and Demonstration: Aims to ensure performance testing of agricultural machinery and equipment, capacity building of farmers and end users and promoting farm mechanization through demonstrations.
 Demonstration, Training and Distribution of Post Harvest Technology and Management (PHTM): Aims at popularizing technology for primary processing, value addition, low cost scientific storage/transport and the crop by-product management through demonstrations, capacity building of farmers and end users. Provides financial assistance for establishing PHT units.

3) Financial Assistance for Procurement of Agriculture Machinery and Equipment: Promotes ownership of various agricultural machinery & equipments as per norms of assistance.

4) Establish Farm Machinery Banks for Custom Hiring: Provides suitable financial assistance to establish Farm Machinery Banks for Custom Hiring for appropriate locations and crops.

5) Establish Hi-Tech, High Productive Equipment Hub for Custom Hiring: Provides financial assistance to set up hi-tech machinery hubs for high value crops like sugarcane, cotton etc.

6) Promotion of Farm Mechanization in Selected Villages: Provides financial assistance to promote

appropriate technologies and to set up Farm Machinery Banks in identified villages in low mechanised states.

7) Financial Assistance for Promotion of Mechanized Operations/hectare Carried out Through Custom Hiring Centres: Provides financial assistance on per hectare basis to the beneficiaries hiring machinery/equipments from custom hiring centres in low mechanized areas.

8) Promotion of Farm Machinery and Equipment in North-Eastern Region: Extends financial assistance to beneficiaries in high-potential but low mechanised states of northeast.

Farm Mechanization programmes are also being implemented through other missions/schemes. The Central Sector schemes 'Promotion and Strengthening of Agricultural Mechanisation through Training, Testing and Demonstration' and 'Post Harvest Technology & Management' stand merged with this Sub-Mission.

3. 12th International Congress on Mechanization and Energy in Agriculture (ADAGEN2014) was held in Cappadocia, Turkey



12th International Congress on Mechanization and Energy in Agriculture (ADAGEN2014) was held on 3rd - 6th September in Cappadocia, Turkey. The agricultural mechanization and energy congresses have been traditionally held in Turkey for 36 years as national and international. The Department of Agricultural Machinery, Faculty of Agriculture, and University of Cukurova organized ADAGENG2014 with the contributions of TARMAKBIR (Turkish Association of Agricultural Machinery & Equipment Manufacturers), CIGR, EurAgENg and

TUBITAK.

Mechanization plays a key role to increase production efficiency in agriculture. Therefore, many countries are trying to upgrade their level of agricultural mechanization. In globalizing world, one of the prerequisite of this is the knowledge transfer. From this point of view, ADAGENG2014 presented a great opportunity to meet the challenge of exchanging data, techniques and ideas in Cappadocia, which is a unique place in the world.

(The information is provided on http://www.seedbuzz.com/news-events/events/12th-internationalcongress-on-mechanization-and-energy-in-agriculture-adageng201, 23-Jun-2014, last seen on 31-Sep-2014)

4. The 3rd International Conference on Agro-Geoinformatics Held in Beijing, China

The 3rd International Conference on Agro-Geoinformatics (Agro-Geoinformatics 2014) was held in Beijing on August 11-14, 2014. The event was co-organized by the Institute of Agricultural Resources and Regional Planning of Chinese Academy of Agricultural Sciences (CAAS-IARRP), the Center for Spatial Information Science and Systems of George Mason University (GMU-CSISS), National Agricultural Statistical Service of United States Department of Agriculture (USDA-NASS), and the Chinese Association of Agricultural Science Societies (CAASS). And over 200 scientists and scholars from 15 countries (Belgium, Canada, Australia, Colombia, Germany, India, Ireland, Japan, Philippines, Netherland, Spain, Thailand, Turkey, and China) participated in the conference.

(The information is provided on

http://www.caas.cn/en/newsroom/international_cooperation_update/242829.shtml, last seen on 30-Sep-2014)

5. ASEAN+3 Countries Agreed on Joint Approach in Agriculture Promotion Scheme for 2015-2019



ASEAN+3 (China, Japan and South Korea) countries have agreed on joint approach in an agriculture and forest products promotion scheme for 2015-2019. According to a joint press statement of the 14th meeting of ASEAN+3 Ministers on Agriculture and Forestry, a total of 6,730 tons of rice were stockpiled under the ASEAN+3 Emergency Rice Reserve Agreement, of which 6,150 tons have been distributed to the Philippines to help typhoon Haiyan victims.

ASEAN+3 countries also reaffirmed the ASEAN+3 cooperation on food, agriculture and forestry as one of the main vehicles towards the long-term goal of building an East Asian community with ASEAN as the driving force and encouraged the plus three countries to continue supporting the implementation of the roadmap for an ASEAN Community 2009-2015 and contribute to the ASEAN Community Post- 2015 Vision.

(Information is provided on http://en.apdnews.com/news/be69bca8d09443859f3dcd07e4afb0eb.html, 25-Sep-2014. Last seen on 29-Sep-2014)

6. Thirty-Sixth Meeting of the ASEAN Minister on Agriculture and Forestry (36th AMAF)



The ASEAN Ministers of Agriculture and Forestry (AMAF) held 36th Meeting on 23 September 2014 in Nay Pyi Taw, Myanmar, under the Chairmanship of H.E U Myint Hlaing, Union Minister, Ministry of Agriculture and Irrigation of Myanmar.

The topic on sustainable markets and financial investment in the agricultural sector was included at the meetings for the sustainable development of agricultural production among the 10 ASEAN countries. Minister for Environmental

Conservation and Forestry U Win Tun pointed out that it is necessary to talk about protection of mangrove forests as environmental conservation of Myanmar in the meeting.

(The information is provided on http://www.philippine-press.com/2014/07/myanmar-to-host-36th-aseanministerial-meeting-on-agri-forestry/, 01-Sep-2014 and http://www.asean.org/news/asean-statementcommuniques/item/thirty-sixth-meeting-of-the-asean-minister-on-agriculture-and-forestry-36thamaf?category_id=26, 26-Sep-2014, last seen on 30-Sep-2014)

Forthcoming Events of CSAM in 4th Quarter of 2014

Date	Event	Venue
28-30 October 2014	Regional Roundtable of National Agricultural Machinery Associations in Asia and the Pacific	Wuhan, China
17-19 November 2014	10 th Session of the Technical Committee of CSAM	Siem Reap, Cambodia
	Regional Workshop on Establishing the Regional Database of Agricultural Mechanization in Asia and the Pacific	

Demise of Dr. S. K. Tandon



Dr. S. K. Tandon passed away on 15 January 2014. CSAM wishes to extend its condolences to Dr. S. K. Tandon's family and friends. Dr. Tandon worked as Assistant Director General (Engg.), Indian Council of Agricultural Research (ICAR), New Delhi. He was involved in Planning, Coordination and Monitoring of Agricultural Engineering Programes of the country. Dr. Tandon was an active member of CSAM's network, and made great contribution to CSAM's activities. The Centre for Sustainable Agricultural Mechanization (CSAM) is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), based in Beijing, China. This Newsletter is issued quarterly to update Member States on the latest project activities of the Centre. It also collects information from Member States on agricultural mechanization policies, sustainable agricultural technologies and best practices. For submission of background information and feedback on the Newsletter, please contact Ms. Sheng Wu, Research Assistant of CSAM, at wus@un-csam.org



Layout Design: WEI Zhen Cover Photograph: WEI Zhen CSAM, Centre for Sustainable Agricultural Mechanization, is a regional institution of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), based in Beijing, China. CSAM started operations in 2004, built on the achievements of the Regional Network for Agricultural Machinery (RNAM) established in 1977 with support of UNDP, FAO and UNIDO, and the United Nations Asian and Pacific Centre for Agricultural Engineering and Machinery (UNAPCAEM). CSAM serves the 62 members and associate members of UNESCAP.

The vision of CSAM is to achieve production gains, improved rural livelihood and poverty alleviation through sustainable agricultural mechanization for a more resilient, inclusive and sustainable Asia and the Pacific.

CSAM's objectives are to enhance technical cooperation among the members and associate members of UNESCAP as well as other interested member States of the United Nations, through extensive exchange of information and sharing of knowledge, and promotion of research and development and agro-business development in the area of sustainable agricultural mechanization and technology transfer for the attainment of the internationally agreed development goals including the Millennium Development Goals in the Asia-Pacific region.

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