

#### CSAM Regional Initiative on Integrated Straw Management

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# ESCAP-CSAM

SUSTAINABLE DEVELOPMENT GOALS





- **Regional institution** of ESCAP and hosted in China since 2003.
- Regional Hub for South-to-South and Triangular Cooperation servicing 62 ESCAP member States and associate members.
- Dedicate to promoting **international cooperation and partnership** in mandated area of work.
  - Focusing on **Sustainable Development Goals** (SDG) 2 (Zero Hunger), SDG 1 (no poverty), SDG 17 (Partnerships for the Goals).

### **Our Vision**

CSAM's vision 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 NATIONS

#### **Constraints on Promoting Sustainable** Agricultural Mechanization in Asia-Pacific

Small land holdings 0 Limited manufacturing capacity 0 Weaknesses in policy environment 0 Limited institutional capacities 0 Inadequate regional coordination

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### CSAM's Key Functions to enable Sustainable Agricultural Mechanization



South-South and Triangular Cooperation underlies all of CSAM's work

#### ESCAP CSAM

#### CSAM's Main Initiatives for Sustainable Agricultural Mechanization



Regional Forum on Sustainable Agricultural Mechanization



Asian and Pacific Network for Testing of Agricultural Machinery (ANTAM)



Regional Council of Agricultural Machinery Associations (ReCAMA)



Building resilience of smallholder farmers through South-South Cooperation



Integrated management of straw residue



Research, data, publications, policy advisory services



Training and institutional capacity building



Engagement of youth



Poverty alleviation in China



4<sup>th</sup> Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific (23-25 November 2016, Hanoi, Vietnam)
Leading the way for Climate-Smart Agriculture through machinery and practices

# 4<sup>th</sup> Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific

Leading the Way for Climate-Smart Agriculture through Machinery a Practices

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#### ESCAP CSAM

# **Research Paper**

- Status of Straw Management in Asia-Pacific and Options for Integrated Straw Management
  - Published in 2017
  - Covering East Asia, South Asia, South East Asia
  - To collect proven practices/technologies of straw management in member countries
  - Outcomes and findings of the paper were circulated at the **Regional Workshop** on Integrated Straw Management in Dec. 2017 in Kathmandu, Nepal



Status of Straw Management in Asia-Pacific and Options for Integrated Straw Management

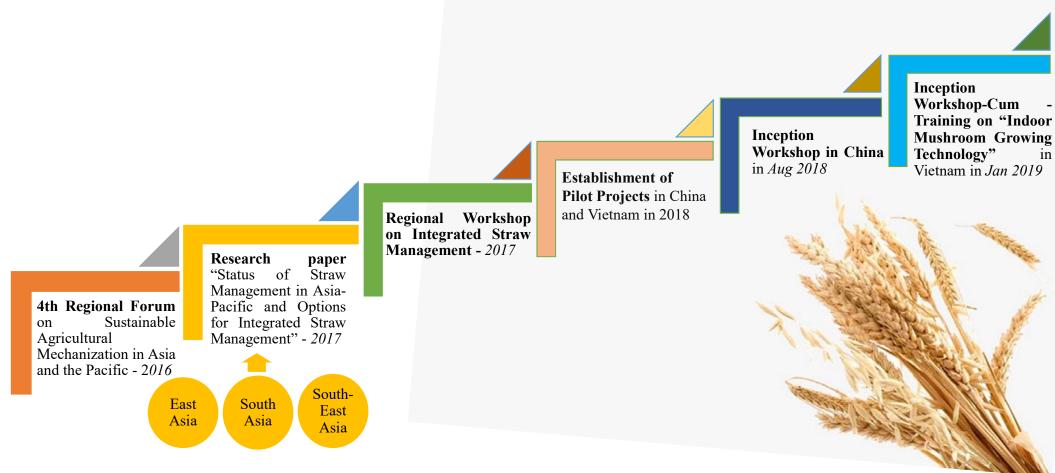


## **Pilot Projects**

- Launched in 2018 in China and Vietnam
- Objectives:
  - To develop an **innovative**, **circular and green model** of integrated straw management;
  - To **enhance awareness** of farmers and other key stakeholders on technologies and models for integrated straw management;
  - To **upscale application** of successful integrated straw management technologies and models.



## Overall progress





## Pilot Project on Integrated Straw Management in China

- Location: Laixi, Qingdao, Shandong Province
- Partners:
  - China Agricultural University (CAU)
  - Qingdao Administration of Agriculture and Rural Affairs
  - Laixi Administration of Agriculture and Rural Affairs
  - Qingdao Zhitao Agricultural Machinery Specialized Cooperative
- Pilot Models:
  - Straw used as fertilizer, fodder, bio-gas production, mushroom growing in a circular manner







Pilot Project on Integrated Straw Management in China

– Inception Workshop (*Aug. 2018*)





Pilot Project on Integrated Straw Management in China

– Partner Engagement Event (*Apr 2019*)



## Pilot Project on Integrated Straw Management in Vietnam

- Location: Can Tho City
- Partners:
  - Sub-Institute of Agricultural Engineering & Post-harvest Technology (SIAEP)
- Pilot Models:
  - $\circ~$  Straw used for mushroom growing





Pilot Project on Integrated Straw Management in Vietnam

- Inception Workshop (*Jan. 2019*)



## Pilot Project on Integrated Straw Management in Nepal (under preparation)

#### • Partners:

- Department of Agricultural Engineering (DoAE), Purwanchal Campus, Institute of Engineering (IoE), Tribhuvan University
- o Krishna Daana Udhyog (KDU)
- Agricultural Engineering and Post Harvest Section (AEPHS), Department of Agriculture (DoA), Ministry of Agriculture and Livestock Development
- Pilot Model:
  - $\circ~$  Straw used as fodder



# **Engagement of Cambodia**

#### Focal Point:

- Department of Agricultural Engineering (DoAE), Ministry of Agriculture, Forestry and Fisheries
- Context:
  - Active research and promotion on conservation agriculture
  - Regional Workshop (2018) and Regional Training (2019) on CA organized
  - Keen interest in mechanization solutions for integrated straw management



## Way Forward...

#### Continuation of:

- $\circ~$  Research and analytical work
- $\circ~$  Field activities and capacity building
- Regional knowledge exchange



# **Contact Us**

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# ...WE HOPE TO STRENGTHEN OUR COLLABORATION IN FUTURE...

Thank you