



Project “Enabling Sustainable and Climate Smart Agriculture in Cambodia, Indonesia and Nepal Through Mechanization Solutions for Integrated Management of Straw Residue and Air Pollution Monitoring”

23 Feb 2023

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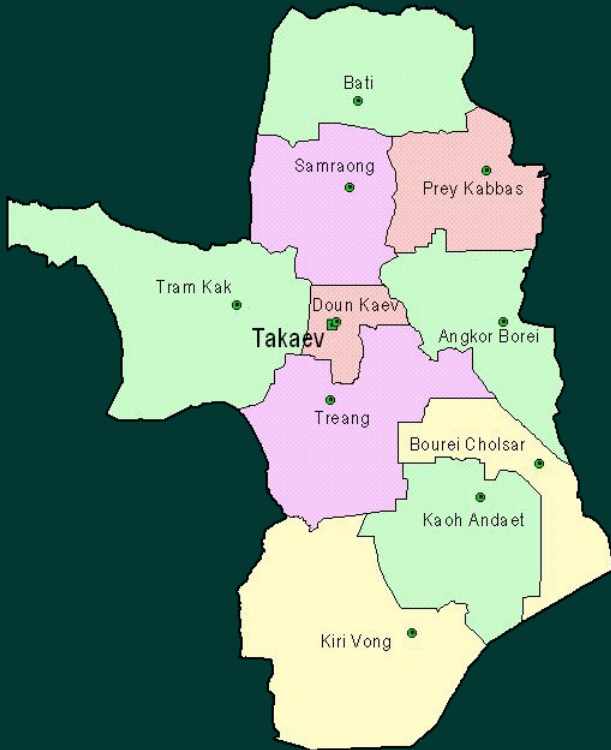
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1. Overview

Takeo Province



- ❑ Paddy production area 3 million h.a
- ❑ Paddy yield 3.1 tons/h.a
- ❑ Rice straw remains in paddy field about 10 million ton
- ❑ Paddy production in Takeo got 3rd rank in the country
- ❑ Most of rice straw was burned in rice field after harvesting

2. Baseline survey result

- About 70% of farmers burn the rice straw after harvest
- Do not have no enough time to collect the rice straw
- Lack of equipment to collect the rice straw
- Lack of knowledge on effects after burning the rice straw
- Most of farmers use machinery for the paddy production, cow raising is reduced
- Lack of growing technique on mushroom production

3. Mechanization based interventions

Try to promote machinery utilization to the farmers in the area

- Promote baler to collect the rice straw
- Promote land preparation and planting method technique by using tractor/hand tractor attached with disc plow, rotavator and seed drill
- Try to promote mushroom production, tree & vegetable growing technique using rice straw to cover
- Try to promote farmers to raise more cows

4. Result from field test

Baler

- Conducted field test in Kbal Por agricultural engineering center
- Removed the small sprocket from the baler and installed the new bigger sprocket
- Field capacity 1.07 ha/hr
- Collect around 88 bales/hr with average of bale 18kg



4. Result from field test (con't)

Thai kit

- Conducted field test in Kbal Por agricultural engineering center
- Adjust row from 28cm/row to 20cm/row each
- Adjust seed rate from 60kg/h.a to 90kg/h.a
- Field capacity 1.78 ha/hr





5. Training and awareness

Conducted 4 awareness sessions, 2 for baler awareness in Sambour and Thlok commune and 2 for Thai kit awareness in Sambour and Srogne commune



6. Key achievement and benefit

- Conducted baseline survey by interviewing 101 farmers (53% females)
- Held an inception workshop **Project “Enabling Sustainable and Climate Smart Agriculture in Cambodia, Indonesia and Nepal Through Mechanization Solutions for Integrated Management of Straw Residue and Air Pollution Monitoring”** at Kept province with 54 participants (7 females)
- Conducted 1 field test on baler
- Conducted 1 field test on Thai Kit seed drill
- Conducted 1 farmer awareness session on baler in Sambour commune with 39 participants (29 females)
- Conducted 1 farmer awareness session on baler in Thlok commune with 35 participants (11 females)



6. Key achievement and benefit

- Conducted 1 farmer awareness session on Thai Kit seed drill in Sambour commune with 35 participants (18 females)
- Conducted 1 farmer awareness session on Thai Kit seed drill in Sronge commune with 35 participants (08 females)
- Published 100 baler manuals and 100 Thai kit manuals
- Refer to M&E form, all participants preferred and adopted the baler and Thai kit seed drill for their agricultural cooperative(AC) and commune but they cannot afford to buy it, they suggest to get or borrow it from the project. They suggested project to continue for more awareness session to get broadly understanding with all their members in AC and commune

6. Key achievement and benefit

- Regarding to government programme, all activities in the project, representative from provincial department of agriculture is invited to participate and suggest to include and promote the project activities to other area in province
- As well as the department of agricultural engineering will include the project activities in other province if government budgets are available
- DAEng suggested to get the baler and Thai kit seed drill from the project keep at Kbal Por agricultural engineering centre for more sustainable use, awareness session and demonstration. (Example the PDA's staff or ACs want to borrow the baler for demonstration to other farmer or ACs members)



7. Key learning and recommendation

- Baler's awareness and demonstration in area, all farmers preferred and suggested to borrow and get one baler for AC if it is possible
- Should have more baler awareness and demonstration to local machinery service providers in order get more understanding and interesting in baler business
- Should have an equipment which can collect rice straw in wet condition
- Thai kit seed drill's awareness and demonstration in area, farmers do rice seed production (seasonal rice seed variety like Phkar Rumdoul), they preferred the equipment but for the farmer who grew short rice seed variety, more work is needed to get them to believe and adopt
- Should have more Thai kit seed drill's demonstration for rice seed production's farmers, seed producer groups, AC and local machinery service's providers to provide further understanding and scale up adaptation.

Some pictures



Some pictures



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Thank you for attention

