Labour-Saving Technologies in the Asia-Pacific Region: Opportunities and Challenges to Empower Rural Women

Asia-Pacific Policy Dialogue on “Women’s economic empowerment in the changing world of work”
23 -24 February 2017, Bangkok, Thailand
OUTLINE

1. Changing Agriculture in the Asian Region
2. Rural Women in Agriculture
3. Unequal Access to Resources by Rural Women
4. Examples of FAO’s Work on Labour-saving Technologies
5. Challenges on the Adoption of Labour-saving Technologies by Rural Women
6. FAO’s Role
CHANGING AGRICULTURE IN THE ASIAN REGION (OVERVIEW)

**Context**
- Increase urbanization
- Changing diets
- Effects of Climate Change
- Migration of men from rural areas to urban/abroad

**Asian agriculture is currently changing**
- More pressure on natural resources (water, soil)/Degradation
- Competing uses of land
- More threats on the livelihoods of rural communities
- Scarce agricultural labour
- Increase labour cost
- **Feminization of agriculture** and ageing of farmers
- Moving from labour intensive towards **mechanized operations**

Source: FAO. 2015. A Regional Strategy for Sustainable Agricultural Mechanization: Sustainable Mechanization across Agri-Food Chains in Asia and the Pacific region
RURAL WOMEN IN AGRICULTURE

- Comprise 40-50% labour in Agriculture in East and South-East Asia and 30% in South Asia

- They perform HIGH DRUDGERY tasks

- They perform Multiple tasks SIMULTANEOUSLY

UNEQUAL ACCESS TO RESOURCES BY RURAL WOMEN

Women in Agriculture, Fishery and Forestry received 7% total investment

Women represent 10% of agricultural landholders in Asia

Extension only reach 5% of women that make up agricultural work labour

FAO. 2016. Gender and Land Rights Database
Women’s full human, productive and adaptive potentials are constrained by Work Burden and Gender Inequality.

Labour-saving technologies and practices offer valuable solutions to:

- Reduce women’s work burden
- Reduce women’s drudgery, health hazards and improve livelihoods
- Free time for undertaking remunerative activities and better care of themselves
- Add value to agricultural produce, increase income
Examples of FAO’s work on Labour-saving Technologies
DRUM SEEDERS: A TECHNOLOGY THAT SAVE TIME AND MONEY

- Use for Direct Seeding of pre-germinated rice seeds

- When compared to manual transplanting:
  - Labour productivity increases 8 times
  - Reduction of production cost: Save 106 USD/ha*
  - Improved use of inputs: Save 4 times seeds
  - Additional Source of income by providing services

Source: Interviews to farmers and trainers of Farmer Field School (FFS) three districts of Sayabouly province, Lao PDR (FAO Project TCP/LAO/3601/C1)
* Second planting onwards
* Based on local price of labour per journey of 8 hours (approx. 6.8 USD)
PORTABLE CUTTER: A TECHNOLOGY THAT SAVE TIME AND MONEY

- Use for harvesting rice, maize

- When compared to manual harvesting:
  - Labour productivity increases 5 times
  - Reduction of production cost: Save 41 USD/ha*
  - Additional Source of income by providing services

Source: Interviews to farmers and trainers of Farmer Field School (FFS) three districts of Sayabouly province, Lao PDR
*Second harvest onwards
FAO THIAROYE OVEN:
INCREASE AGRIBUSSINES OPPORTUNITITES AND REDUCE HEALTH HAZARS

- Fish-technology used by women’s fish processor groups
- Smokes, dries and stores finished product

When compared to traditional kilns:

- Reduce smoking/processing **2-24** times
- Reduce wood consumption **3-6** times
- Improved storing conditions
- Safer smoking conditions
- Opportunity to market better quality products

Feasibility study commissioned by SP4 (Cot d'Ivoire)
More Labour-saving Technologies available in the Region Asia-Pacific
LABOUR-SAVING TECHNOLOGIES AVAILABLE IN THE REGION

Manual Groundnut Decorticator (Capacity: 60-68 kg/h)

Hand operated grain cleaner (Capacity: 200 kg/h)

Pedal and power operated grain cleaner (Cap: 300-800 kg/h)

Credit: Agro Produce Processing Division, CIAE
LABOUR-SAVING TECHNOLOGIES AVAILABLE IN THE REGION

Potato Peeler
(Capacity: 50-60 kg/h)

Potato Slicer
(Capacity: 40-50 kg/h)

Credit: Agro Produce Processing Division, CIAE
LABOUR- SAVING TECHNOLOGIES AVAILABLE IN THE REGION

Manual direct seeder (maize, legumes)  
(Capacity : kg/h)

Hand Corn Sheller  
(Capacity : 20- 40 kg/h)
CHALLENGES ON THE ADOPTION OF LABOUR-SAVING TECHNOLOGIES BY RURAL WOMEN

Women adoption rate of innovative agricultural technologies and services remains low

- **Household Dynamic:** Women’s tasks are mechanized, men take over.
- **Social Norms:** Mobility restriction, technologies can be seen as inappropriate to women.
- **Physical Challenges:** Tend to be designed for men, lead to injure and health-related problems
- **Complementary Resources:** Limited access to resources and education make difficult access to labour-saving technologies, limited capacity to invest, and hire services.
- **Extension Services and Training:** Already limited and it mainly target men

Source: FAO. 2016. Addressing women’s work burden: Key issues, promising solutions and way forward
FAO’S ROLE

- Knowledge sharing and advocacy of successful cases
- Technical Assistance on different projects and programmes in the field on rural women’s empowerment
- Influence governments on the importance of investing in technologies adapted to women’s need
- Support governments in leveraging funds to support women’s empowerment
- Promote interdisciplinary approaches and multi-stakeholder partnerships
- Advocate for sex disaggregated data collection
- Mainstream Gender into Policies and Strategies at National and Regional level

FAO gender website

FAO policy on Gender Equality
www.fao.org/3/a-i4741e.pdf
Thank you

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