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Centre for Sustainable
Agricultural Mechanization



NIAAM

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Gender Mainstreaming in Sustainable Agricultural Mechanization

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Agricultural Mechanization in Cambodia

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1. Status of Mechanization in Cambodia

Agricultural mechanization in Cambodia has been increasing widely since 1990s. Until now, farm operations, which were done manually or by draft animal, have been replaced by machineries mainly in **land preparation, spraying, weeding, harvesting, threshing, and milling**. Other farm operations such as transplanting, fertilizing, etc. are still done manually because they are complicated to be mechanized and because of their availability in local market and prices are still issues.

Recently, government agencies have introduced:

- Direct seeding machines in order to improve the efficiency of sowing;
- Rice transplanters
- Agricultural drones for application of pesticides and fertilizers.

1. Status of Mechanization in Cambodia

The Department of Agricultural Engineering (DAEng) has prioritized to mechanize **rice crop production** and seeks to extend the mechanized production of **other crops**, and also **vegetables, fruits, livestock, forestry, fisheries** and **rubber**. However, the promotion of agricultural mechanization in Cambodia is constrained by a number of factors including **scattered policies** and strategies, lack of human resources, limited operational skills, missing link between actors, and short of funding.

Mechanization can increase production, reduce women farmers' workload and facilitate some hard operations.

2. Gender Gaps in Cambodia (4-5 pages)

There were **1,637,631** women farmers and **1,661,837** women farmers in 2016 and 2021 respectively (MOP2021). And there are no data for the mechanization solutions recorded.

Table: Labour force by Economic Sectors

Labor Force	Socio-economic Survey 2016 (MOP)			Socio-economic Survey 2021 (MOP)		
	Total	Women	Men	Total	Women	Men
Total workforce	8,608,000	4,167,000	4,441,000	8,967,000	4,339,000	4,628,000
Agriculture (%)	36.40	39.30	33.70	35.70	38.30	33.30
(Persons)	(3,133,312)	(1,637,631)	(1,496,617)	(3,201,219)	(1,661,837)	(1,541,124)
Industry (%)	26.60	25.20	27.90	27.30	24.30	30.20
Service (%)	37.00	35.50	38.40	37.00	37.40	36.50

2. Gender Gaps in Cambodia

The gender yield gap in agriculture sector, especially the access to support services and agricultural extension, remains an attentive challenge due a number of factors facing women, including the distant location of the extension services, limited literacy, lack of time, lack child care services, inability to travel far away from home, and other socio-cultural factors.

Women are mostly involved in raising livestock while men are engaged more in crop cultivation, aquaculture or capture fishing, and in non-agricultural activities.

Migration has a strong influence on gender roles and division of labour in rural migration of young women and men to garment factories, construction work, service industry and others.

2. Gender Gaps in Cambodia (4-5 pages)

Poverty, insufficient income from farming activities and debts are key reasons for the decision of rural households to migrate or send family members away to alternative work.

In addition, women's utilization rate of agricultural tools/equipment and technology remain lower than men. Therefore, the policy and framework for gender mainstreaming of the Ministry of Agriculture, Forestry and Fisheries (MAFF), 2022-2026 clearly states the commitment of MAFF to contribute “To promote women's economic empowerment through women's equitable access to and use of resources and services and improved conditions for women in agriculture” in order for women to better access to agriculture resources and access to information, knowledge, and technical extension services to support their agriculture work.

2. Gender Gaps in Cambodia (4-5 pages)

Due to the fact that women play an important role in household decision making, in agriculture technical and technology adoption, especially decision related to spending, women needs information about the financial benefits before making any decision; the promotion and trainings should be conducted by taking into consideration of giving sufficient information to women for economic analysis as well as the consideration of easing the participation from women, including timing, location and appropriate means, etc.

3. Good Case Introduction of Empowering Women via sustainable agricultural mechanization

- Introduce:
 - Simple and smart agricultural mechanization such as solar water pump (irrigation), mini-power tiller (land preparation), sprayer/drone (seed, fertilizer, pesticide application);
 - Non-agriculture: Solar egg incubator, Handicrafts (basket, scarf, ...);
 - Healthy nutrition for babies and pregnant ladies
- Empower women as leaders in all levels from national and provincial levels
- Encourage and nominate women to join national and international events in the country and abroad.

4. Recommendations and suggestions in the country and regional levels (What could be done better to address the specific needs of women in applying mechanization?)

- Promote the uses of modern agricultural machinery that women can access, manage, and operate efficiently;
- Provide opportunities and encourage women farmers to participate in all activities for production and processing of agricultural products in national and regional levels;
- Form women farmers team/group and link them in agricultural machinery value chain;
- Prepare clear policies, strategic plans, and activities in agricultural mechanization for women farmers;

4. Recommendations and suggestions in the country and regional levels (What could be done better to address the specific needs of women in applying mechanization?)

- Support women's capacity, decision making, ownership, digital agricultural technologies and market accessibility aligns with gender mainstreaming policy and strategic framework in agriculture (2022-2026);
- Collaborate both national and regional as well as to build good relationships between public institutions, private sectors, development partners, farmers and other stakeholders to enhance efficient management of agricultural mechanization in Cambodia;
- Promote gender equality and women's empowerment in all sectors and at all levels are a major priority (with the collaboration and support from line ministries and development partners) for contributing to the promotion of gender equality in national policies.

Thank you



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