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TECHNICAL SUPPORT FOR SUSTAINABLE AGRICULTURAL MECHANIZATION OF SMALLHOLDER FARMS FOR ENHANCING AGRICULTURAL PRODUCTIVITY AND PRODUCTION, AND REDUCING DRUDGERY OF WOMEN AND YOUNG FARMERS

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SDGs:



Country: Nepal

Project Code: TCP/NEP/3703

FAO Contribution: USD 200 000

Duration: 1 November 2019 – 31 December 2021

Contact Info: FAO Representation in Nepal

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Implementing Partners

Ministry of Agriculture and Livestock Development (MOALD), Department of Agriculture (DOA), Centre for Agricultural Infrastructure Development and Mechanization Promotion (CAIDMP).

Beneficiaries

The direct beneficiaries were 1 375 farmers (709 male, 666 female). Indirect beneficiaries included extension workers, farmers' groups and cooperatives, agriculture tools and equipment fabricators, blacksmiths and workshop operators.

Country Programming Framework (CPF) Outputs

CPF Outcome 1: Sustainable agricultural production and productivity, marketing and consumption for the eradication of hunger and malnutrition. CPF Target 1.1.3.1: By 2022, promote adoption of improved inclusive and gender sensitive technologies and practices. (e.g. technologies and practices contributing to crop, livestock and forest management, value chains development, seed and breed improvement, farm mechanization and custom hiring services, control of adverse environmental effects and the growth of invasive plant species).



The outmigration of youth caused by the lack of employment opportunities in the country has left the burden of farming to women, over 80 percent of whom are now employed in the sector. Labour shortage has also led to the abandonment of agricultural land, contributing to a decline in production. Labour accounts for a large portion of the costs of farm production and, with the depletion of family labour in agriculture, direct farming costs must also cover those of hired labour, which tends to destabilize the level of other agricultural inputs. Even with increased government spending in the sector, the commercialization of the farming system has not attained the level expected, partly because of the limited amount of sustainable agricultural mechanization (SAM), which can save labour and reduce drudgery, particularly that of women, in agricultural operations. FAO assistance was requested to enhance productivity and reduce the drudgery of women and youth in the sector through increased agricultural mechanization.



IMPACT

By using the SAM approach to improve agricultural machinery services, the project contributed to increasing agricultural production and productivity. Thanks to the project, the capacity of stakeholders at central, district and local levels to adopt sustainable agricultural mechanization was strengthened, and crop production and productivity increased. In addition, project activities enhanced the resilience of conservation farming in terms of climate change adaptation.

BACKGROUND

Agricultural growth and productivity remain central to poverty reduction. This is particularly true in Nepal, where agriculture employs two-thirds of the labour force and provides almost one-third of the gross domestic product. Agricultural production is dominated by subsistence crop subsectors, with farms adopting a mixed farming system of crops, livestock, and agroforestry. These sectors could be instrumental in rescuing the country from poverty if existing subsistence agriculture practices were transformed into modernized and profitable production systems.

Realizing the huge potential of the sector, the Government has developed and enforced an Agriculture Development Strategy (2015-2035), designed to increase women's ownership and rights over land, to invest in improved farming practices, technology and mechanization, and to strengthen the opportunities for farmer groups and cooperatives to access credit and services.





ACHIEVEMENT OF RESULTS

The project had three outputs, all of which were achieved. The first involved a gender-sensitive assessment of targeted cropping systems and districts in order to select sustainable agricultural tools, machinery and equipment that would reduce drudgery across agrifood chains. The second output was devoted to capacity-building for extension staff and farmers in farm operations, repair and maintenance (55 staff: 34 men, 21 women), business skills (38 staff: 12 men, 26 women) and SAM production systems (258 farmers: 58 men, 200 women). In addition, three training events were held for 51 participants (17 men, 34 women) at repair and maintenance service centres. Curricula and training materials were also prepared for extension workers and farmers, as well as awareness-raising materials. The final output concerned the establishment of custom hiring centres (CHCs) in the two agro-ecological pilot districts of Terai and Mid-hill. A total of 38 farmers (12 men, 26 women) received training in relevant business skills, while the CHCs were rendered operational with the provision of 131 items of agricultural machinery and equipment (AM&E). The CHCs were also strengthened through the establishment of repair and maintenance workshops equipped with the necessary basic machines and tools. Standard operating procedures (SOPs) were prepared for the two CHCs in order to orient target beneficiaries in their operation.

IMPLEMENTATION OF WORK PLAN AND BUDGET

The COVID-19 pandemic caused repeated disruption in the delivery of the SAM technologies and considerably increased the workload of the project. Despite this, all envisaged activities were implemented within the planned budget. Risks related to the pandemic, and all environmental and social risks, were successfully managed by the project.



FOLLOW-UP FOR GOVERNMENT ATTENTION

It is recommended that the government ensure that follow-up actions to review, update and formulate policies, strategies, programmes and guidelines related to sustainable agricultural mechanization and focused on women and young farmers are conducted. The capacity of mechanization service groups (MSGs) should be developed. The government should also validate the Concept Note on “Sustainable Agricultural Mechanization for Enhancing Productivity (SAMEP)” by equipping technical institutions at federal, provincial and local level with the capacities, policies and plans required. In this context, the possibility of funding by donors and development partners should be explored. Finally, technical and business skills within the growing agri-machinery hire services sector should be developed and improved.

SUSTAINABILITY

1. Capacity development

The project achievements are embedded in governmental organizational structures that are likely to survive beyond the project and that are committed to the sustainability of results. In addition, the partnerships and alliances among stakeholders that have been created or strengthened will contribute to the project’s sustainability in the years ahead.

In terms of exit strategy, the project prepared a Concept Note (SAMEP) that will provide a reliable bridge for outgoing and upcoming projects. The federal, provincial and local governments are also expected to continue to integrate the project results into their broader development programme.

2. Gender equality

Project activities met the needs and priorities of female and male beneficiaries and stakeholders. Women’s majority involvement in the management of CHCs ensured female participation. The project substantially increased the use of improved machinery and lowered production costs; this led to an increase in income that had a positive impact on women’s empowerment, as well as reducing their workload.

3. Environmental sustainability

The project addressed the environmental, economic and social dimensions of agrifood systems, particularly in terms of rural abandonment, environmental degradation and climate change. It emphasized and encouraged conservation farming, employment generation and entrepreneurship development.

4. Human Rights-based Approach (HRBA) – in particular Right to Food and Decent Work

The SAM approach contributed significantly to food security and the realization of the Right to Adequate Food by substantially enhancing yields, boosting rural agriculture, reducing poverty and ensuring an adequate food supply. The project also reduced farmers' dependence on costly and difficult-to-access inputs, helping them to enhance their food security by increasing yield and crop production. Most project activities also generated employment by making use of local labour.

5. Technological sustainability

The technology introduced by the project was appropriate and flexible. It placed women farmers at the centre of the decision-making process, lowered food production costs and time, and avoided dependence on external inputs. Locally-sourced machinery reduced farmers' dependence on expensive and hard-to-access products, their vulnerability to price volatility and the risk of indebtedness. Beneficiaries were capacitated in SAM practices through hands-on training and CHCs were established with the AM&E required for crop production. The capacity of stakeholders to pursue project activities without further technical assistance has been established in most cases, as the adopted SAM approach was underpinned by local technologies. However, some farmers might need additional technical assistance.

6. Economic sustainability

Local government bodies in the project area have already integrated the project outputs into their regular programmes, with a commitment to finance SAM programmes from their regular budget. Financial institutions are prepared to support the programme in compliance with their prevailing acts, rules and regulations. The private sector is also interested in investing in the production of goods and services related to the adoption of SAM good practices.

The products and services developed by the project are affordable to beneficiaries and stakeholders. The adoption of these services will also provide additional revenue and income.



DOCUMENTS AND OUTREACH PRODUCTS

- ❑ **FAO.** Responding to COVID-19 impact in agriculture: The case of Sustainable Agricultural Mechanization in Nepal.
- ❑ **FAO.** Gender-responsive Need Assessment for Mechanization - Questionnaire for FAO wider-use. www.fao.org/3/cb7559en/cb7559en.pdf
- ❑ **FAO.** Synopsis of GESI-Responsive Agri-Mechanization in Siraha and Udaypur Districts.
- ❑ **FAO.** GESI-responsive Agricultural Mechanization in Nepal. 1 p.
- ❑ **FAO.** 2021. Review of and recommendations for Custom Hiring Centres for mechanization in Nepal and the Asian region. Rome. <https://doi.org/10.4060/cb7964en>
- ❑ **FAO.** Agricultural Mechanization for Women Empowerment for Labour Management, Drudgery Reduction, Efficient Farming System! Flyer in English and Nepali. 2 pp.
- ❑ **FAO.** 2021. Safe and Correct Use of Powered Machines. Poster in English and Nepali. <https://www.fao.org/3/cb7995en/cb7995en.pdf>
- ❑ **FAO.** Empowering Women Farmers: A mechanization catalogue for practitioners. In English and Nepali.
- ❑ **FAO.** Success Story Videos - Terai and Mid-hill.
- ❑ **FAO.** Project upscaling Concept Note on Sustainable Agricultural Mechanization for Enhancing Productivity.



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Increased small holder's land and labour productivity through sustainable agricultural mechanization	
Outcome	Drudgery reduction of women and young farmers through increased availability and use of improved agricultural machines, tools, equipment and services	
	Indicator	Number of women and/or young farmers who gained access to agricultural mechanization services (disaggregated by sex, ethnicity and age).
	Baseline	0
	End Target	At least 60 beneficiary farmers with access to mechanized agriculture services.
	Comments and follow-up action to be taken	<p>The project exceeded the end target as more than 275 beneficiary farmer households (total 1 375: 709 men, 666 women) now have access to mechanized agriculture services.</p> <p>With regard to drudgery reduction for women and young farmers, the project:</p> <ul style="list-style-type: none"> - increased farmer's awareness and knowledge of mechanization needs by category and identified possible adoption constraints; - identified workload and time-consuming operations of major crops through first-hand data collection; and - promoted machines that were suited to the landscape and existing cropping system, and to the reduction of drudgery during the time-consuming operations of major crops. <p>Women were empowered through:</p> <ul style="list-style-type: none"> - involvement in machine operation and management alone or through CHCs; - enhanced technical and business capacities through business development, management, and decision-making training, with the active participation of identified institutions (e.g., Agricultural Mechanization Promotion Centre (AMPC)/CAIDMP, Agricultural Machinery Research and Testing Centre (AMRTC)/Nepal Agricultural Research Council (NARC); and - increased adoption of, and access to, small-scale mechanization, leading to greater productivity. <p>Livelihood systems of women and rural community members were improved through:</p> <ul style="list-style-type: none"> - increased use of improved AM&E and services, leading to enhanced productivity; - the provision of mechanization services, creating extra jobs and providing salaries to technicians and mechanics; and - time saved by the increased use of AM&E, allowing women to devote more time to themselves, their families and other income-generating activities, enriching nutritional status and providing increased income to support the education of their children. <p>Institutional systems to ensure sustainability were identified, as follows:</p> <ul style="list-style-type: none"> - at federal level: MOALD, DOA and CAIDMP will implement the developed upscaling Concept Note on SAMEP and continue the programmes on a larger scale; - at local level: municipalities are committed to implementing programmes with the technical assistance of district-based agriculture knowledge centres (AKCs); - at village level: CHCs are established as women farmers' group organizations; women expressed their commitment to operate the machinery and conduct businesses with their enhanced technical and business capacity. <p>Follow-up actions to be taken by the government and line agencies:</p> <ul style="list-style-type: none"> - ensure follow-up actions to review, update and formulate policies, strategies, programmes and guidelines related to SAM, focused on smallholder women and young farmers in the context of drudgery reduction and labour scarcity; - continue to develop the capacity of MSGs in agricultural mechanization selection, operation and business management skills of CHCs, focusing on women and youth; - validate the upscaling Concept Note on SAMEP by equipping technical institutions at federal, provincial and local levels with capacities, policies and plans, and jointly take action to explore possible funding by donors and development partners; and - mandate MOALD to develop and improve technical and business skills in the agri-machinery hire services sector. Training of Trainers curricula and follow-on training programmes can be developed in collaboration with the Public Council for Technical Education and Vocational Training, and private and non-governmental organization sectors.

Output 1	Gender-sensitive assessment on targeted cropping systems and districts to feed the selection of sustainable agricultural mechanization items to reduce drudgery across the agri-food chains carried out		
	Indicators	Target	Achieved
	Report with the findings on major bottlenecks and time-consuming operations for women and youth and recommendations.	One	Yes
Baseline	0		
Comments	<p>Institutional and human resource arrangements were made by MOALD for project planning, execution and monitoring at all levels. Focus group discussions were held at chosen sites with 126 key stakeholders (61 women and 65 men of different age groups representing key farming activities). Time-consuming activities were identified by category, e.g. in Siraha, land preparation for rice takes 1-15 hours; in Udaypur, the same task takes over 60 hours.</p> <p>Resource persons and host institutions (AMPC/CAIDMP, AMRTC/NARC, CAIDMP and training centres under DOA) were identified to address the identified constraints through resources and capacity-building. Assessment reports with findings on major bottlenecks and time-consuming operations for women and youth were prepared, along with recommendations, survey reports and end-line survey reports. This activity was repeatedly interrupted following the onset of COVID-19.</p>		
Activity 1.1	Prepare and conduct inception workshop of the project		
	Achieved	Yes	
	Comments	<p>Institutional and human resource arrangements were made for the planning, execution and monitoring of the project at all levels: MOALD nominated Chief of CAIDMP as National Project Coordinator (NPC) of the Project Management Unit (PMU) and member-secretary of the Project Steering Committee under the chairmanship of the MOALD Secretary at national level; at district level, the PMU coordinated the project through district-based AKCs and, at village level, through the local municipality.</p> <p>Orientation programmes for stakeholders on project objectives and activities were conducted by a joint mission led by CAIDMP and FAO Nepal, in coordination with the local municipality. Responses were noted and considered for updating the project work plan during the inception workshop, coordinated by CAIDMP at national level.</p>	
Activity 1.2	Selection of the districts and villages to undertake the project implementation		
	Achieved	Yes	
	Comments	<p>Target districts were selected by the joint mission led by the personnel of CAIDMP and FAO Nepal. Local municipalities also participated. The districts and villages selected were:</p> <ul style="list-style-type: none"> - Siraha district Lahan Municipality Ward No. 13 Ganeshpur in the Terai (special focus on rice-wheat production system); and - Udaypur district Belaka Municipality Ward No. 5 Shikharmadhi in Mid-hill (special focus on maize-based production system). 	
Activity 1.3	Selection of beneficiaries		
	Achieved	Yes	
	Comments	<p>Beneficiaries' selection criteria were formulated by the PMU of CAIDMP, working closely with FAO Nepal for technical assistance. The final list of beneficiaries was based on these criteria and on the interest and commitment of potential project beneficiaries. In Siraha district Lahan Municipality Ward No. 13 Ganeshpur, nine members (eight women, one man) were selected to form a Mechanization Service Provider Committee (MSPC) from 25 members of MSGs formed from five women user groups (total of 125 households). In Udaypur district Belaka Municipality Ward No. 5 Shikharmadhi, nine members (seven women, two men) constituted an MSPC formed from six women user groups (total of 150 households).</p>	
Activity 1.4	Gender sensitive assessment		
	Achieved	Yes	
	Comments	<p>A survey using the KOBO toolbox was held for 126 key stakeholders (61 women, 65 men) at the project sites. The most time-consuming activities were identified by category, and by geography. The results of the survey show mechanization needs and priority by category, and possible adoption constraints in terms of size of equipment, affordability, mobility and distance to potential service centres. Other factors included membership of local farmer groups and access to information, training and technology maintenance services.</p>	
Activity 1.5	Pre-selection of machines, equipment and tools for drudgery reduction		
	Achieved	Yes	
	Comments	<p>Selection of AM&E was based on gender-sensitive assessment, cropping systems, landscape and local availability. The selected AM&E benefit women as managers and leaders of the CHCs and participants in the decision-making process, as customers of CHCs by enabling them to access mechanization services in a timely manner, and as operators and mechanics receiving wages for their work. In total, 131 units of machinery were procured to support CHCs/MSGs at pilot sites.</p>	

Output 2	Capacity of extension workers and farm level stakeholders (youth and women) on sustainable agricultural mechanization increased		
	Indicators	Target	Achieved
	<ul style="list-style-type: none"> - Number of government staff trained in sustainable agricultural mechanization (farm operation, repair and maintenance) (disaggregated by gender). - Number of government staff trained in custom hiring mechanization services (CHMS) (business skills). - Number of farmers trained in sustainable agricultural mechanization on selected production system. - Number of repair and maintenance service centres trained. - Number of curricula and materials prepared for training of extension workers/farmers (one curriculum and one training material for agri-mechanization and CHC) and brochure for awareness-raising. 	<ul style="list-style-type: none"> - 20 - 20 - 80 - One per target cluster. - 3 	Yes
Baseline	<ul style="list-style-type: none"> - 0 - 0 - 0 - 0 - 0 		
Comments	<p>The training conducted to capacitate extension workers and farm-level stakeholders was as follows:</p> <ul style="list-style-type: none"> - 55 government staff (34 men, 21 women) trained in SAM (farm operation, repair and maintenance); - 38 government staff (12 men, 26 women) trained in CHMS (business skills); - 258 farmers (58 men, 200 women) trained in SAM on selected production system; - 51 participants (17 men, 34 women) trained at repair and maintenance service centres at the target cluster. <p>Material prepared for training and awareness-raising comprised one curriculum and training material for agri-mechanization and CHCs, and four awareness-raising publications.</p> <p>The activity was interrupted by the onset of COVID-19. CAIDMP should provide follow-up training.</p>		
Activity 2.1	Identify and agree with the project supports: machines, equipment and tools, shed construction materials, improved seeds, mulching and irrigation facilities suitable for the location		
	Achieved	Yes	
Activity 2.1	Comments	The PMU/CAIDMP finalized the selection of AM&E and other support in consultation with technical personnel. The list of equipment and tools with specifications was prepared with the technical assistance of FAO national consultants. The technical specifications of the AM&E were approved by FAO and beneficiaries, along with the types of support proposed. The AM&E and shed construction materials were procured in line with FAO procurement rules and procedures, and distributed by the government counterpart and project staff.	
	Design and implement training to build service delivery capacity of the extension workers and technical capacity of the farmers on agricultural mechanization		
Activity 2.2	Achieved	Yes	
	Comments	The training expert assessed training needs and developed a training curriculum and materials on AM&E. Training was provided to 55 extension service providers and beneficiary farmers (34 men, 21 women).	
Activity 2.3	Design and implement repairing and maintenance training course for the local service providers (blacksmiths and other local workshop operators and repairing centres in nearby cities or at the selected villages)		
	Achieved	Yes	
Activity 2.3	Comments	The training expert assessed training needs and developed a curriculum on AM&E focused on operation, repair and maintenance. Training was provided to 51 local workshop operators and repairing centres at the selected villages (17 men, 34 women).	
	Design and implement training to build the capacity of the Mechanization Service Groups for adoption of mechanization in selected production systems		
Activity 2.4	Achieved	Yes	
	Comments	The training expert assessed training needs and developed a curriculum to build MSG capacity in the adoption of SAM in selected production systems and the efficient management of AM&E. Training was provided to MSGs, for a total of 258 participants (58 men, 200 women).	

Activity 2.5	Design and implement awareness-raising and training activities on the importance of agriculture mechanization for commercialization		
	Achieved	Yes	
Comments	<p>Awareness-raising materials were designed, developed and disseminated to all stakeholders, including farmers, workshop owners, traders and decision-makers in local, provincial and federal government. The materials comprised:</p> <ul style="list-style-type: none"> - Empowering Women Farmers - A Mechanization Catalogue for Practitioners. - Safe and Correct Use of Power Machines (poster). - Gender Awareness - Women Responsive Agri Mechanization (flyer). - Success story of women farmer (videos). 		
Output 3	Custom hiring centre established and operationalized at group/cooperative level		
	Indicators	Target	Achieved
	<ul style="list-style-type: none"> - Number of CHCs established and operational. - Number of farmers trained in CHMS (business skills), disaggregated by sex, ethnicity and age. 	<ul style="list-style-type: none"> - 2 - 40 	Yes
Baseline	<ul style="list-style-type: none"> - 0 - 0 		
Comments	<p>The CHCs were established in both agro-ecological pilot districts (Terai and Mid-hill). A total of 38 farmers (12 men, 26 women) received training in CHMS (business skills). The established CHCs were operationalized with the grant support of 131 items of AM&E and the provision of capacity-building in CHMS (business skills) to farmer MSGs, in line with cropping seasons. The established CHCs were strengthened through the establishment of repair and maintenance workshops with the necessary basic machines and tools. SOPs were prepared for CHCs to orient target beneficiaries.</p>		
Activity 3.1	Design, pilot and validate the Custom Hiring Service Centres adapted to the local needs and conditions		
	Achieved	Yes	
Comments	<p>The international consultant reviewed a successful business model on hiring services in the region and beyond. Reference was made to the FAO publication "Hire Services as Business Enterprise" on identifying and analysing a suitable business model. The business model of women-managed smallholder farmer groups was identified as suitable and proposed for the establishment of CHCs. Government institutions were identified (municipalities at local level, AKCs at district level and CAIDMP at federal level) and support put in place to establish CHC services. Validation workshops on women-managed CHCs were then held at district level, as follows:</p> <ul style="list-style-type: none"> - Udaypur district - 27 participants including Deputy Mayor, Ward Chairman of the project area, Agriculture Branch and administrative chiefs, Chief of AKC. - Siraha district - 25 participants including Ward Chairman of the project area, Agriculture Branch and administrative chiefs, Chief of AKC, Chief of Centre for Agroforestry Technology (local community-based organization). <p>The NPC from CAIDMP participated in each event. Rigorous interactions took place among local stakeholders and farmer MSGs in all districts, expressing commitment to upscaling SAM. A final lesson-learned sharing workshop was attended by: MOALD Secretary (Agriculture) undersecretaries and other officials; the DOA Director General and other officials; a representative from the Department of Livestock Services; Chief, National Agri-engineering Research Centre, NARC; a representative from the Prime Minister Agriculture Modernization Project; President, Nepal Agricultural Machinery Entrepreneurs Association; the presidents of MSGs from the pilot site municipalities; the NPC, focal person and officials from CAIDMP and DOA; and staff from FAO Nepal.</p>		
Activity 3.2	Facilitate the formation of Mechanization Service Groups to operate the Custom Hiring Centres in target districts		
	Achieved	Yes	
Comments	<p>The SOPs were prepared for CHCs to orient the target beneficiaries, and the formation facilitated of:</p> <ul style="list-style-type: none"> - an MSG named Ganesh Digo Krishi Yantrikaran Krishak Samuha, with 25 members. These members belong to five women user groups (total of 125 households) in Siraha district Lahan Municipality Ward No. 13 Ganeshpur; and - an MSPC named Dip Jyoti Krishi Yantrikaran Sanchalak Samiti, formed from six women user groups (150 households) in Udaypur district Belaka Municipality Ward No. 5 Shikharmadhi. <p>Continued support to the MSPC was provided during the project by local government staff of Lahan and Belaka municipalities. Belaka municipality shared the cost of the machinery shed construction.</p>		

Activity 3.3	Design and implement training to build the business and management capacity of the Mechanization Service Groups	
	Achieved	Yes
	Comments	Farmer training in relation to the mechanization hiring services of selected business models was provided. Operation and management guidelines and general procedures and conditions were prepared and training provided to 38 beneficiaries (12 men, 26 women).
Activity 3.4	Establish Custom Hiring Centres in target districts	
	Achieved	Yes
	Comments	The CAIDMP staff, in collaboration with project staff, organized meetings and workshops with MSGs, cooperatives and local government on the importance of the CHC and its formation process. SOPs for CHCs to orient the target beneficiaries were prepared. CHCs were provided with 131 items of AM&E, covering activities from land preparation to food processing.
Activity 3.5	Document and disseminate lessons learned and good practices on mechanized agro-enterprise to the wide audience through electronic and printing media	
	Achieved	Yes
	Comments	Good practices and lessons learned were documented and shared in the final workshop, which covered the following issues: <ul style="list-style-type: none"> - the limited availability of women-responsive machinery in the context of drudgery and labour scarcity; - the lack of investment capacity of smallholder farmers to purchase machinery; - the need to develop capacity in the selection and operation of appropriate agricultural machinery and business management skills of CHCs/MSGs, with a focus on women and youth; - the lack of availability of suitable land to establish CHCs, as a major constraint for smallholder farmers; and - management shortcomings as a result of CHCs not having or not fully practising the SOPs. FAO project staff collected and analysed the information, and prepared information materials for dissemination.
Activity 3.6	Develop project document for upscaling large-scale outcomes and impacts	
	Achieved	Yes
	Comments	The project drafted an upscaling Concept Note on “Sustainable Agricultural Mechanization for Enhancing Productivity” developed from field-level experiences and lessons learned from the project, for wider replication, upscaling and dissemination.

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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