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Increased Capitalization of Agriculture Needs on Favorable Terms

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Introduction

The financial sector should work with commercially oriented farmers and entrepreneurs to strike the necessary financial deals that are required for increasingly commercialized farming. Enabling smallholder farmers' access to credit is part of the policies and strategies to improve the productivity of farmers. Commercial banks should be available to farmers at lower interest rates, and co-operatives and microcredit institutions should serve as intermediaries between formal banks and smallholder farmers. Microfinance institutions should offer a basic credit facility for both low-cost and motorized equipment, and mechanization should include crop protection tools and irrigation tools [1]. Ethiopia could continue to use animal traction alone or in combination with engine power by making significant innovations in the implements and by improving the oxen's body condition. The progressive farmers in the hills are in search of appropriate agricultural tools and machinery, but they fail to get into the local markets. Experience shows that for small farmers, the pathways for mechanization technology, especially tractor adoption, are between two-wheel tractors and four-wheel tractors [2]. Ethiopia's government has a lot to learn from Asian and African experiences, as well as from its own experience. In Ghana, promoting affordable, smaller tractors suitable for local soil and farming conditions is a key part of the agricultural development strategy. In Thailand, 2WTs have been increasingly adopted, substituting for the use of draft animals, while 4WTs are dominant in India and Nepal. Strategically selecting appropriate technologies and practices from other rice-producing countries in Africa and Asia and adapting them to Ethiopian conditions. Policymakers need clear options backed by evidence [3]. Research reports recommended that strategizing the training and outreach activities of NRRTC is essential to strengthening the capacity of all value chain actors and members of the national rice mechanization system. The most important details in this text are the structures of landholding, incentives and support measures for mechanization, preferential treatment on capital machinery importation, and multiple value-added taxes on imported raw materials. Land consolidation is the most important policy instrument, and legislation on land leasing, contract farming, and land banking are suggested options for promoting the mechanization and commercialization of agriculture [4]. Tax and subsidy rationalization is needed to promote the use of farm machinery without distorting the market. An immediate work plan is needed for the development of strategies and action plans for the implementation of the new Agriculture Mechanization Promotion Policy. Other critical issues to consider include custom hiring support, mechanization service provision through private and cooperative agents, improving smallholder access to mechanization, and unleashing human energy [5]. Mechanization should be part of the government's long-term economic development strategy. Ethiopia is importing rice at more than three times the amount it is producing domestically. Rice mechanization has the potential to increase productivity by saving labour, minimizing drudgery, reducing post-harvest loss, and increasing rice quality. In the last two decades, different governmental and non-governmental organizations and the private sector have been involved in accessing rice mechanization technologies [6]. However, the status of agricultural mechanization indicated that each rice production system was done by hand or with rudimentary tools or types of equipment, as well as traditional animal-drawn implements. Draft power is so important for primary tillage that 93% of households rely on livestock, primarily oxen [7]. Rice harvesting is done manually using a serrated sickle for cutting the standing crop and a further 20 man-hours/ha for collection and piling [8]. Farmers are responsible for most of the pre-milling operations, with 78.8% of the farmers selling unprocessed rice. Processors and assemblers are also in small towns and are stored in their homes, mill houses, or small storage rooms using 50 to 100 kg plastic bags. The major challenges and constraints to this low level of rice mechanization are fragmented farm holdings, poor marketing channels, a lack of awareness of pre-harvest management and utilization, a scarcity of pre-and post-Harvest technologies, lack of finance and a lack of hiring service providers, an intensive cropping pattern, a supply of poor quality machines, an inadequately skilled workforce, and limited research facilities [9]. Ethiopia has some opportunities for rice mechanization research and development, such as the establishment of a mechanization strategy, free taxes and duties on imported agricultural machinery, suitable rice farm topography, farmer motivation and awareness of agricultural mechanization technology, and the presence of a national rice research and training centre. These opportunities include improving the research system, training local entrepreneurs, repair and maintenance services, promoting custom hiring centers, local manufacturing of farm tools and implements, organizing agricultural cooperatives, improving landholding and landownership structures, assessing foreign experiences, connecting machine importers and service providers, and encouraging investments in the rural infrastructure [10].

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Conflict of Interest

None

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