

The Factors Influencing Wheat Row Planting Adoption in Wogera District, North Gondar Zone, Amhara Regional State, Ethiopia

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Wheat is Ethiopia's fourth most significant grain crop, although yields were poor. Adoption of better technology is one of the most promising methods to boost agricultural productivity and output. However, the adoption of new technology has been hampered by a number of issues. As a result, the purpose of this study was to investigate the factors that influence the adoption of wheat row planting in the Wogera district. The data was analysed using both descriptive and econometric approaches. According to the poll, 43 percent of respondents were adopters and 57 percent were non-adopters of wheat row planting. The Tobit model was used to discover characteristics that influence wheat row planting adoption and intensity. According to the results of the Tobit regression model, a total of 14 explanatory factors were found to be significant in influencing the adoption of wheat row planting.

Sub-Saharan Africa's (SSA) economy is dominated by persistent agriculture, which employs almost half of the population. Agricultural production and productivity in SSA, on the other hand, are reported to be poor. Ethiopia, like any other SSA, has a strong agricultural industry. The average wheat production in SSA is 1.7 tons/ha, which is approximately 50% lower than the global average. A variety of reasons contribute to low agricultural production, including population pressure, which has resulted in severe soil degradation and tiny farm sizes, recurring drought, and a lack of farm technology. Agriculture is the most important sector of the Ethiopian economy, accounting for over 43 percent of GDP, 80 percent of employment, and nearly 70 percent of foreign export profits. Cereals were the most important food grains in the agricultural production sub-sector. Crop production accounts for 50 percent of agricultural GDP, while livestock and forestry account for 47 percent and 3 percent, respectively. Cereals are the most important staple food crops in terms of both areas planted and volume produced. Cereals were grown on 9.9 million hectares of land in the 2013/14 crop season, yielding 22 million tonnes of food grains. He accounted for 79.38 percent of total land and 85.81 percent of total food grain output in the country. Wheat was one of the world's most significant cereal crops, and it is a staple diet for around one-third of the world's population. Ethiopia is Sub-Saharan Africa's second-largest wheat producer, after only South Africa. It is the fourth most significant cereal crop, with an annual yield of roughly 3.43 million tonnes grown on 1.63 million hectares. According to CSA statistics, it accounts for around 17% of total cereal area in the nation. Its national average yield, however, is at 21 quintals per hectare. His output is poor in comparison to the global average of 40 quintals per hectare. Wheat is grown mostly in the Oromia and Amhara regions of Ethiopia, with minor amounts produced in Tigray and the SNNPR regions. In these four regions, there are 16 main wheat production zones. It's also one of the most significant cereal crops in Amhara National Regional State, where it's produced for both food and income. The overall area of wheat cultivation in the region was 427,719.81 hectares, accounting for 10% of total cereal area. Wheat yielded 15 quintal per acre on average in the region. The Amhara region's major wheat producing zones are North Shewa, East Gojjam, and South Wollo, each of which produces more than one million quintals. Other notable wheat-producing zones in the region include West Gojjam, South Gondar, and North Gondar. Improving agricultural production is an essential solution to the challenges of food insecurity and poverty, as well as boosting agricultural growth in Ethiopia. Within the context of the ADLI plan, one of the primary goals of the Ethiopian government is to increase agricultural yields through a coordinated and vigorous extension-based push focused on technology packages including improved seeds, fertilisers, credit, and better management techniques. Row sowing is a crop production technology that has been adopted in recent years. It yields more than broadcasting because it allows for greater weeding, branching out, and nutrient uptake of the plants, as well as less rivalry amongst seedlings.