

Evaluation of interventions of granary area program: A case study of Minneriya major irrigation scheme

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Rice is the staple food of Sri Lankans. To meet the food requirement of the country, the government of Sri Lanka, in 2002 decided that overall paddy production level should be increased to 5 mt /ha within three years. In order to meet this target yield level, 6.5 mt/ha should be reached in the high potential major irrigation areas. Granary Area Programme (GAP) was introduced in 2003 to fulfill this

requirement through improving the productivity of rice in selected high potential irrigation schemes. Agricultural, irrigation and institutional interventions are the main component of the GAP. Objectives of this study were to document the impact of rice productivity improvement programme including GAP, to assess the impact of interventions of the GAP and identify the issues that will strengthen the implementation of GAP.

Rajaela, Yodaela, Divlankadawala, Hathamuna, Wiharagama, and Buddiyaya area of *Minneriya* scheme in *Polonnaruwa* district were selected for the field investigation. Data were collected from randomly selected 70 GAP farmers and 30 non-GAP farmers using structured questionnaire. With regard to components and activities of GAP, Percentage of GAP farmers using high quality seed paddy is 81 percent where as 70 percent of the non-GAP farmers use high quality seed paddy. Percentage of farmers using organic fertilizer in GAP area was 81percent while it was 70 percent in non-GAP area. GAP farmer percentage practice IPM is 32 percent and in contrast non-GAP farmer percentage is 20 percent. GAP farmers used high quality seed paddy, organic fertilizer and IPM practices to control pest than non-GAP farmers. About 43 percent of the GAP farmers and 23 percent of non-GAP farmers used mould board plough or disk plough for ploughing. In harvesting operations 21percent GAP farmers and 10 percent non-GAP farmers used machinery. In threshing 61 percent GAP farmers and 60 percent non-GAP farmers used combined threshers. There is an overall improvement in mechanization of all aspects in paddy cultivation. Within GAP area percentage of farmers who have agreed on Forward Sales Contracts (FSC) is 10 percent. However the buyers have not bought any paddy at the end of the season. This showed that FSC programme is not successful in this area. In order to reveal the yield performance, the Farmer Performance Index (FPI) was employed. It demonstrated that 60 percent of farmers in GAP area and 33 percent farmers in non GAP area have reached more than 100 percent FPI. Around 10 percent of the farmers in GAP area have obtained a paddy yield of more than 6mt/ha while 50 percent-obtained 5-6 mt/ ha. Comparatively, in non-GAP area none of the farmers could obtain 6mt/ha .In fact 67 percent of the farmers obtained less than 5mt/ha. The yields obtained by GAP and non-GAP farmers were compared employing t test of statistics. As the calculated value is 0.0224 (less than 0.05), There is a significant yield improvement in GAP area. It can be stated that overall impact of interventions under GAP is significant.