AGRICULTURAL INPUT ASSISTANCE CARD: DIRECT INPUT SUBSIDY DISBURSEMENT

উন্নয়ন অন্বেষণ
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Agricultural Input Assistance Card: Direct Input Subsidy Disbursement

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Executive Summery

This study focuses on cash subsidy support to the farmers by the government for increasing farm level production. Subsidy on agricultural inputs over the years is substantially increasing but it shows slightly declining trend in 2009-10 than that of the previous years. It was Tk.100 crore in 2001-02 and increased to Tk. 4950 crore in 2009-10 and it has reduced to Tk. 4000 crore (proposed) in 2010-11. Dry season rice farming requires huge cost of production (especially for human labor, fertilizer and irrigation). Per hectare cost of Boro rice production was Tk. 70095 for farmers' farm and Tk.76175 for the research farm. There is no significant difference in cost of irrigation by diesel pump between the farmers' farm (17.09 percent) and the research farm (17.55 percent). In this year, to make farmers benefited directly during Boro, subsidy on cost of diesel for irrigation has been given in cash through farmers' account. Marginal (0.02-0.19 ha) and small (0.20-1.00 ha) farmers have got subsidy of Tk.800 and medium farmers (1.01-3.03 ha) got subsidy of Tk. 1000 only for diesel cost. Allocation of cash subsidy on diesel cost for Boro rice production is only 58.34-6.14 percent of the total cost of production for marginal farmers, 5.83-1.16 percent for small farmers and 1.44-0.48 percent for medium farmers on the basis of their cultivated land. Marginal farmers have enjoyed more advantages in terms of cash benefits (11.99 percent surplus) than small and medium farmers. Because the amount of subsidy given to small and medium farmers is very little compared to the amount he spent for irrigation. There is substantial gap between diesel costs and subsidy obtained (i.e. 72.91 percent for small farmers and 92.81 percent for medium farmers).

It has been urged that the distribution of subsidies by state owned banks should be monitored at the farm level, subsidy should be provided based on the cost of diesel required for the irrigated land area, land owner and sharecroppers for same land and two members of the same family getting agricultural input assistance card should be monitored and checked properly. Besides these, smooth flow of information on subsidy should be confirmed at the farm level and exemplarily punishment should be executed for those persons who take bribe in case of subsidy transaction entry into farmers' list. Moreover, awareness should be built among the farmers about agricultural technology utilization.

Section 01

1.1 Introduction

Agriculture is the most dominating sector of Bangladesh economy, contributing 21 percent to the national GDP. Nearly 77 percent of the total population lives in rural areas and 48 percent depend on agriculture. Total cultivable land is 8.5 million hectare where total area is 14.845 million hectare (MoA, 2010). About 4.8 million hectare arable land has been brought under irrigation. It indicates that about 57 percent of total cultivable lands are irrigated (BBS, 2008). Generally, in Bangladesh, irrigation is mainly applied in dry rice cultivation during dry seasons. Most of the farms are very small and marginal in terms of land holding due to high population pressure. Rice is the dictating crop of agriculture sector and modern rice cultivation is mostly based on seed-water-fertilizer intensive technology, farmers have to incur huge cost to invest in rice production. The modern agricultural system made farmers dependent on market for costly production inputs. Thus, farmers are compelled to be indebted to procure those costly seeds, fertilizers, pesticides, irrigation water, machineries and other equipment at higher rates and these are beyond their capacity. However, food security in Bangladesh through increased food production requires timely and adequate supply of subsidized inputs. Most of the farmers do not have adequate cash capital to meet their production cost. Marginal and small farmers in Bangladesh, who are operating at the subsistence level, are fully dependent on credit market (institutional and non- institutional sources) to meet various expenses of rice production. Present government urged farmers to make Bangladesh self-sufficient in food and launched a new help line to assist the peasantry in cash and kind. The Programme has been undertaken to give subsidy to the farmers for irrigation ahead of the boro season. Under the new system the Agricultural Input Assistant Card holder could open account in local banks and the government would send the money to their accounts to buy diesel and fertilizer and meet expenses for irrigation. However, the study has been conducted by using both primary and secondary information from Islampur upazila under Jamalpur district and Vovokali village under the Mymensingh district. The primary information has been collected from beneficiary farmers by conducting case study. This study is expected to be helpful for researchers, form Islampur under Jamalpur district and Vovokhali under Mymensingh district by conducting case study. This study is expected to be helpful for researchers, policy makers and concerned personnel. Moreover, to achieve the expected outcomes of the study, different authentic data sources have been used.

1.2 Objectives of the Study:

i. To examine the level of subsidy given on agricultural inputs that is distributed among the farmers over the years.
ii. To assess the magnitude of advantages given to farmer through newly agricultural Input Assistance Card
iii. To identify the problem faced by them in getting “Agricultural Input Assistance Card”.

Section 02

2.0 Scenario of Subsidy and Credit in Bangladesh

2.1 Subsidy allocation in Bangladesh

Agricultural input subsidy is a common element in agricultural development. The conventional argument for subsidies in agricultural development is that their primary role is to promote adoption of new technologies and thus increase agricultural productivity (Ellis, 1992). In Bangladesh, subsidy support for producers is provided on different agricultural inputs to boost up agricultural productivity. Subsidies are mainly given to keep the price of production inputs within the purchasing capacity of producers. Only implicit support is given on nitrogenous fertilizers and in the price of diesel i.e. the fuel used for operating the LLPs (Low Lift Pumps) and STWs (Shallow Tube Well) to uplift underground water for irrigation, especially in the dry season. The fertilizer is implicitly subsidized and distributed through a controlled channel keeping the prices reasonably stable. The costs of both irrigation and fertilizer for Boro rice production are higher in Bangladesh. The higher prices of the fertilizers and diesel are the major concerns for giving subsidy to the producers in Bangladesh as incentive for production.

Table 1: Subsidy disbursement over the years, 2001-2011

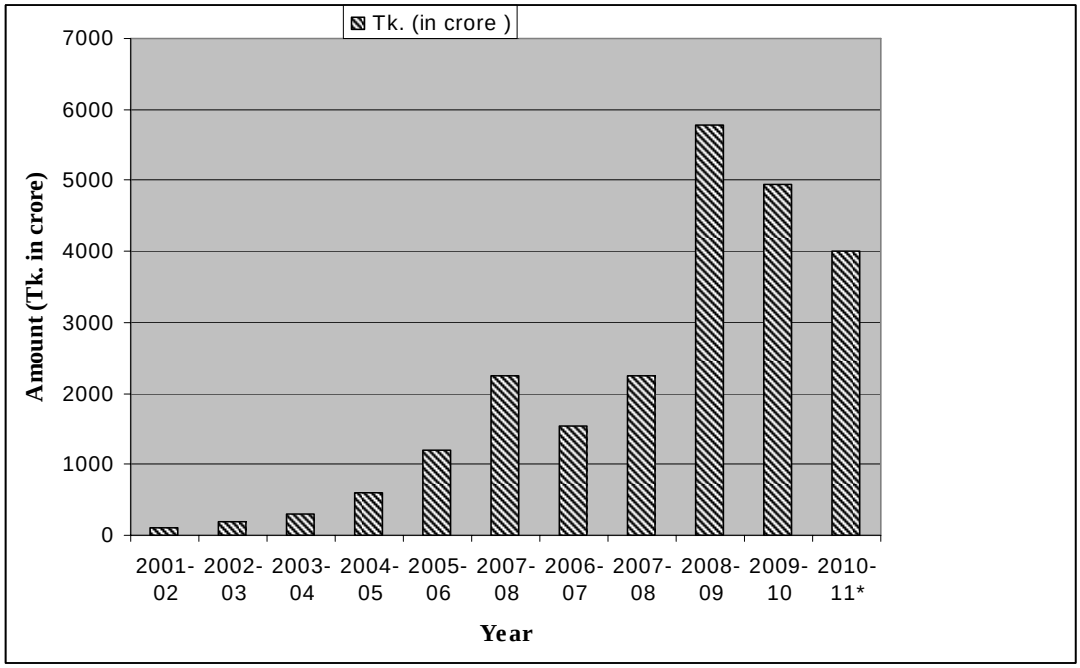
Year	Disbursement (Tk. In crore)
2001-02	100
2002-03	200
2003-04	300
2004-05	600
2005-06	1200
2006-07	1541
2007-08	2250
2008-09	5789
2009-10	4950
*2010-11(proposed)	4000

(Source: Bangladesh Economic Review, 2009 and *budget speech, 2010)

It appears from the Figure-1 that subsidies on agricultural inputs have substantially increased over the years but it slightly declined in 2009-10. Although there is increasing rate of subsidy to farmers, lion share of benefit of subsidy program has gone to the pocket of market intermediaries. It might be due to the fact that agricultural input markets are being volatilized. In fact, market intermediaries are availing themselves this for opportunity.

Subsidy in agricultural sector has declined by 20% compared to the last year budget 2009-10. In the fiscal year 2009-10, the total allocation for agricultural subsidy was Tk. 4950 crore while the current budget proposed Tk. 4000 crore (A Rapid Assessment of National Budget 2010-11).

Figure1: Subsidy disbursement over the years, 2001-2011



(Source: Bangladesh Economic review, 2009; *Budget speech proposed, 2010-11)

2.1.1 New dimension of Govt. support to farmers by Agricultural Input Assistance Card

To make Bangladesh self-sufficient in food, the government announced an "Agriculture Input Assistance Card Programme" that would allow marginal (0.02-0.19 ha), small (0.20-1.00 ha) and medium (1.01-3.03 ha) farmers to get cash subsidies. The new system would conduct smooth cash transfers and reduce misappropriation of financial support. It is to make best use of all facilities sponsored by government. Cash subsidies are given mainly based on the type of farmers through the "Input Assistance Card". Total 1.82 crore farmers of the country will be brought under this programme. Farmers would receive incentives from banks by using the "Agriculture Input Assistance Card" to buy diesel or any other input. For drawing the subsidy and monetary transactions, the farmers have to open bank accounts for only Tk 10. Moreover, the condition for keeping minimal money with a bank account has not been tagged to operating the farmers' accounts and they do not need any identifier to open the account. The Agriculture Input Assistance Card will be considered as the final identity for the farmers.

Bangladesh government has targeted a total of total of 19 million tons of Boro rice production in 4.8 million ha land in 2009-10 (Basak, 2010). Therefore to achieve the targeted production of Boro rice in this year, the irrigation cost would be one of the major concerns for the whole production system. Under this scheme, as the first-ever such agriculture-welfare agenda in the history of Bangladesh, a total of 10 million Boro farmers would be given money through banks as direct subsidy on diesel used for irrigating croplands for the dry-season rice farming. The farmers who are cultivating Boro rice especially under diesel running STWs will take subsidy in cash from bank through their account. Initially marginal and small farmers have got Tk 800 (less than 1.01 ha) and medium farmers have got Tk 1000 (more than 3.03 ha) as cash incentives (The Daily

Star, 17th February). According to statement mentioned in the card, later farmers will also get seed, agricultural credit, fertilizer, other inputs and agricultural resettlement facilities through this card.

2.1.2 Comparative cost of rice production between farmers' farm and researcher's farms

It appears from Table-2 that cost of rice cultivation has included all variable cost items like physical labor, land preparation, seed, fertilizer, manure, irrigation, insecticides etc. Per hectare physical labor cost is found Tk. 20400 for Boro rice cultivation in farmers' farms whereas it is Tk.33824/ha for the researchers' farms. Fertilizer cost of Boro rice cultivation is significantly higher (Tk. 10035.00/ha for farmers' farm) while it is Tk. 19030 for research farm. Irrigation cost is more or less same for farmers' farm and research farm. It is 17.55 percent of total cost for Modern Variety (MV) for farmers' farm while 17.09 percent for research farm. Since Boro rice cultivation is completely dependent on irrigation, a major part of the cost is used for this purpose. Therefore, due to use of higher amount of costly inputs like human labor, fertilizer, and irrigation, its cost of cultivation for Boro rice in Bangladesh is significantly higher. It is also observed that, per hectare cost of Boro rice production is Tk.70095 for the farmers' farm while Tk.76175 is for the researchers' one. Difference in per hectare total costs is 6080. It may be due to the fact that experimental plot needed more labour for intensive monitoring and supervision.

Table2: Cost involvement (Tk ha^{-1}) for rice cultivation in Boro season

Costs items	*Research farm		**Farmers' farm	
	Amount (Tk)	% cost of different factors to total cost	Amount (Tk)	% cost of different factors to total cost
Seedbed preparation	-	-	1500	2.14
Physical labor	33824	36.70	20400	29.10
Land preparation	-	-	4052	5.78
Driver or labour for irrigation	5600	6.08	-	-
Seed	720	0.78	2802	4.00
Fertilizer	19030	20.65	10035	14.32
Manure	-	-	209	0.30
Pesticides/ insecticides	-	-	959	1.37
Herbicide	-	-	93	0.13
Irrigation	15752	17.09	12300	17.55
Total variable cost	74926	81.29	52350	74.68
Interest on operating capital @ 9 % for the crop season	1190	1.35	16000	22.83
Land rent	16000	17.36	1745	2.14
Total cost	76175	100	70095	100

(Source: *Authors calculation based on field survey, Agricultural Economic Division;
** Authors calculation based on cost of experimental farm computed by Farm Management Division, BRRI, 2009)

2.1.3 Contribution of cash subsidy on Boro rice production

In the fiscal year 2010-11, government has decided to support 1.82 crore farmer families under the agro-input assistance card. Therefore, a huge amount of fund must be allocated to support farmers but in the current budget there is no fund being allocated. For boro rice production in the last fiscal year 2009-10, Tk. 750 crore was allocated for purchasing diesel. Therefore, more than Tk. 1483 crore will be rewired for only purchasing diesel during boro season under the card facilities (A Rapid Assessment of National Budget 2010-11).

Table 3: Percentage of diesel subsidy of total cost of Boro rice production for marginal, small and medium farmers

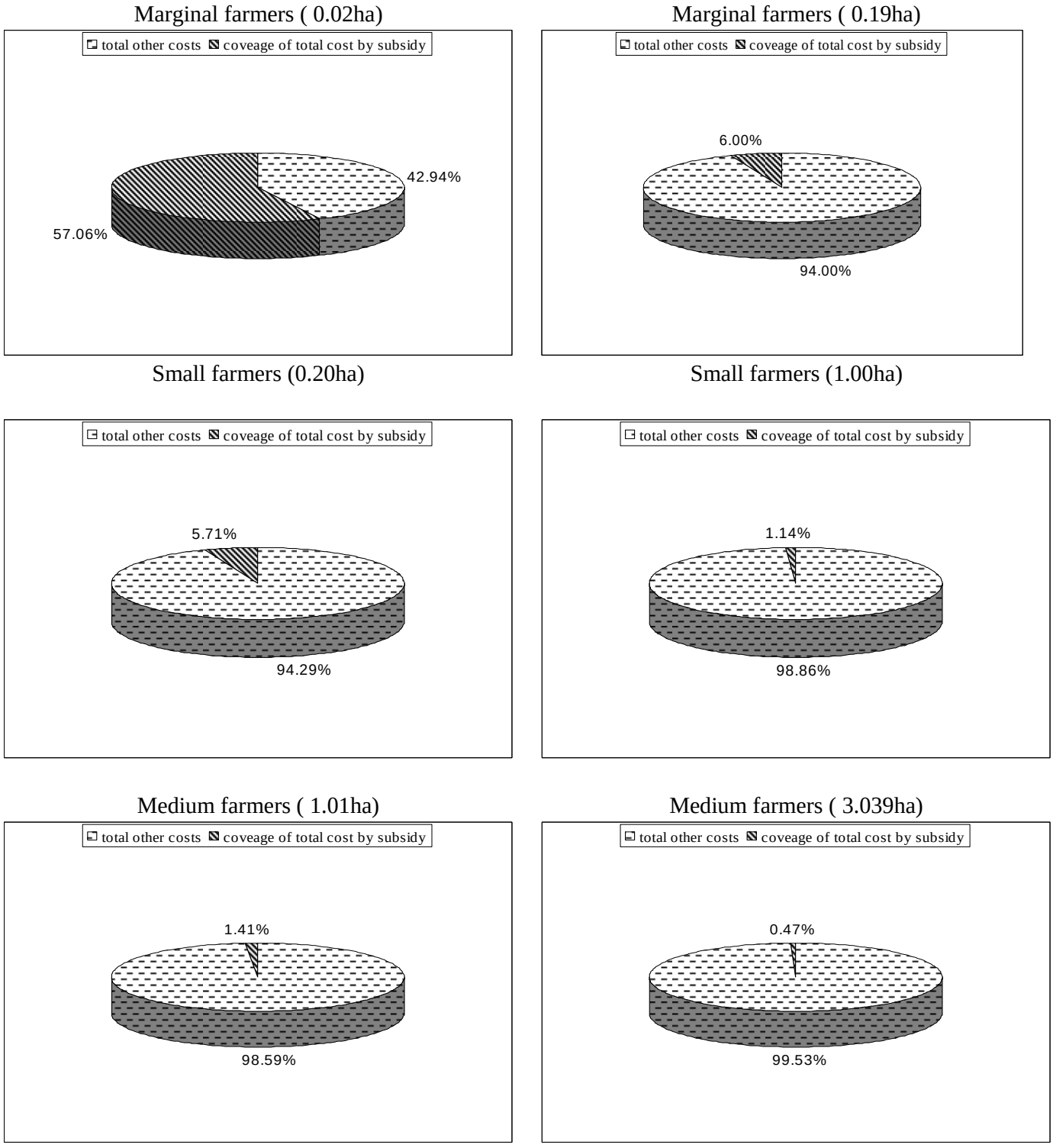
Particulars	Marginal farmers		Small farmers		Medium farmers	
	0.02 ha	0.19 ha	0.20 ha	1.00 ha	1.01 ha	3.03 ha
Total cost (Tk.)	1401.90	13318.05	14019.00	70095	70795.95	212387.85
% coverage of total cot by subsidy	57.06	6.00	5.71	1.14	1.41	0.47
% of others total cost	42.94	94.00	94.29	98.86	98.59	99.53

(Source: Authors calculation based on field survey, Agricultural Economic Division, BRRI, 2009**)**

- Marginal and small farmers got subsidies of Tk. 800 per person for diesel costs and medium farmers got Tk.1000.

It shows that marginal farmer with 0.02 hectare have spent total Tk. 1401.90 and the farmers with 0.19 hectare spent total cost of Tk. 13318.05 for rice production. The subsidy shares of total cost are the range of 57.06 and 6.00 percent for the former and latter marginal farmers. Small farmers with the land holdings of 0.2 hectare and 1.00 hectare have incurred total cost of Tk. 14019 and 70095 respectively. Their subsidy shares of total cost are the 5.71 and 1.44 percent respectively. Likewise, subsidy shares for medium farmers with the landholdings of 1.01 and 3.03 ha are 1.41 percent and 0.47 percent of total cost of production respectively. It implies that subsidy share to total production decreases with the farm size increase. The empirical findings indicate that marginal farmers become benefited more than small and medium farmers.

Figure2: Contribution of cash subsidy on diesel for Boro rice production in FY2010



(Source: Authors calculation based on field survey, Agricultural Economic Division, BRRI, 2009**)**

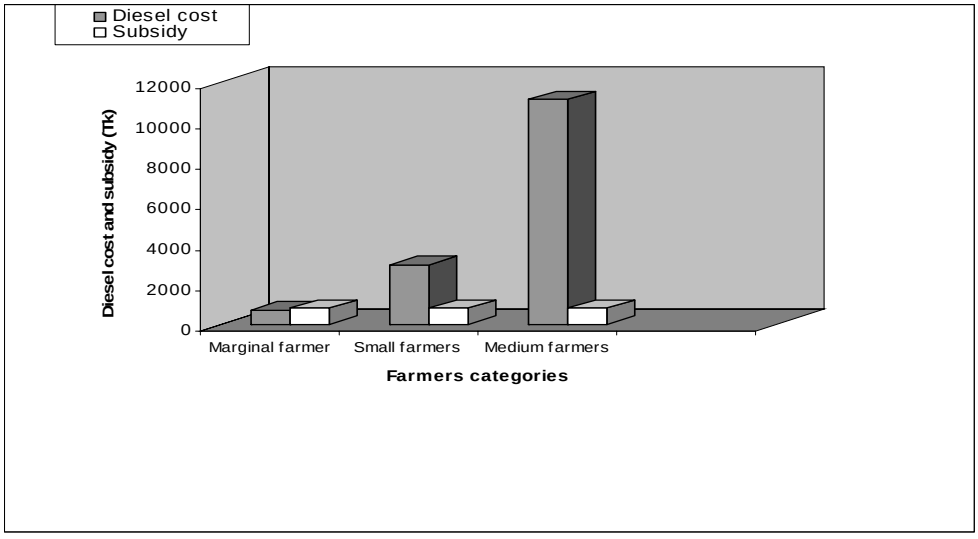
Table 4: Estimated average gap between diesel cost incurred and subsidy support obtained during Boro season in FY 2010

Farmers categories	Total cost of rice production(Tk./ha)	Irrigation cost(Tk./ha)	Diesel cost(Tk,/ha)	Subsidy	% of total cost	% gap
Marginal farmers (0.02-0.19 ha)	7494	1194	720	800	111.99	-11.99
Small farmers (0.20-1.00 ha)	36867	5876	2959	800	27.03	72.97
Medium farmers (0.01-3.03 ha)	138632	22094	11129	1000	7.19	92.81

(Source: Authors own calculation Based on field survey data by Agricultural Economic Division, BRRI, 2009**)**

The farmers who have devoted their land for producing rice under diesel driven STW, are facilitated to take advantages from subsidy program. It implies that marginal farmers enjoy more benefits (about 112) compared to that of small (27.03 percent) and medium farmers (7.19 percent). The amount of subsidy (Tk.800 per person) that small and medium farmers receive is very low compared to the total cost of diesel they incurred for devoting their land for rice production under STWs irrigation. The subsidy on diesel covers 27.03 percent of the diesel cost incurred by small farmers and 7.19 percent by medium farmers. Therefore, there is still a huge greater gap between the subsidy given and diesel cost the farmers spend for irrigation.

Figure 3: Gap between diesel cost and subsidy obtained during Boro season in FY2010



(Source: Authors calculation based on field survey, Agricultural Economic Division, BRRI, 2009)

2.1.4 Problems of Processing Agricultural Input Assistance card

The implementing authority while giving "Agricultural Input Assistance Card" and loans to farmers harassed them in various ways. Most of the farmers were busy in crop production during the period of opening account. Sometimes many farmers failed to follow the full procedures. One of these ways was to pay bribe to Union Porisad (UP) member for entry in the farmer list. It is important to mention that many non-farmers could avail the scope of opening accounts by offering such bribes. Those farmers who delayed in submitting their necessary document, had to pay give more money. Moreover, many farmers living in remote areas were not informed or did not know about this new card system. In some cases, land owners and renting farmers got the card. Box 1 presents the problem of processing the agricultural input assistance card in the rural areas.

Box1

Farhad Ali, a farmer in Islampur upazila under Jamalpur district, is cultivating another's land as sharecropper. He is an illiterate farmer and his residence is very far from BKB. He says that he was not informed of "Agricultural Input assistance Card". He is apathetic about it because he thinks that he is a landless farmer. At the very end of Agricultural credit card activities, he comes to know from his neighbor and SAAO. However, he understands that he was also eligible for getting this subsidy. Immediately he contacted the UP member and requested him very politely so that he can avail this opportunity. After facing many problems finally he gets the credit card. He also opines that other farmers also face the problems like him and they are to offer bribes for getting the card. He also mentions that two members from same family got agricultural credit card at a time and it is a symptom of malpractice.

(Sources: Case study in Jamalpur)

Section 03

3.0 Conclusion and Policy Recommendation

The study indicates that the trend of subsidy distribution for agricultural input is increasing over the years. But farmers have actually been benefited very little from it. During Boro, 2010 the subsidy was given directly in cash only for the farmers who were irrigating their crop land with diesel pump. It also indicates that no remarkable difference was found in irrigation cost between farmers' farm and the research farm. Irrigation is significantly intensive in dry rice production and a major part of the cost is used for this purpose. The government has provided diesel subsidy to help the farmers so that they get it as incentives to increase rice production. Marginal farmers have enjoyed more advantages in terms of cash benefits than small and medium farmers because the amount of subsidy given to small and medium farmers is very little compared to the amount they have spent for irrigation. The case study shows that the farmers are facing many problems of getting facilities from "Agricultural Input Assistance Card". Major problem includes the lack of information for farmers in remote rural areas.

- Subsidy provided through "Agricultural Input Assistance Card" by the government on agricultural inputs such as fertilizers, irrigation and electricity must be monitored at the farm level.
- Feedback assessment at the field level has to be done for newly introduced system of disbursing subsidy support to farmers.
- Subsidy is provided (on diesel) per farmer by considering their category based on farm size, is very minimum. But it should be done on the basis of the cost of diesel required for the irrigable land area and strategy should be designed to minimize the gap between diesel cost and the subsidy given.
- Awareness should be built among the farmers by training on proper utilization and understanding of "Agricultural Input Assistance Card'.

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