



Aga Khan Foundation-Afghanistan

Baghlan Regional Office

Participatory Management of Irrigation System (PMIS)

Natural Resources Management (NRM)

System of Rice Intensification (SRI)

PMIS/NRM/SRI Marking the plots & Transplantation 2008

To: Vincent "Thomas"

From: Ali Muhammad "Ramzi"

Subject: SRI marking the plots and transplantation

Date: 20-May -2008

This year 2008 we start our system of Rice Intensification (SRI) transplantation in our own (AKF/PMIS) farm on the date of 20-21 may/31-Saur/1-Jawza in Baghlan province. Although This Farm is governmental Or which is a governmental research farm AKF-A also has five Jeribs (1 Hectare) land as the decision has been made between Baghlan local government and Aga Khan Foundation Baghlan regional office. AKF, A has a strong relationship to Afghan government or AKF-A always involves Afghan government at its natural resources management as we are the witness that AKF has its farm at the governmental research farm and involves government staff. At this five Jerib land AKF has different experiments including SRI. One Jerib land is allocated for SRI; One Jerib (**2000 Sq meters**) is generally for rice cultivation but it divided in to two parts at **1000Sq** meters rice has transplanted at traditional methods and at **1000Sq** meters rice has transplanted in system of rice intensification SRI method, SRI team proposed last year 2007 that for 2008 we should cultivate rice at both methods in order to get a better comparison result.

It should be mentionable last year we suggested to have a fertile land as we learnt from our last year experiences But this year also we couldn't find the ideal land as we proposed last year because at this land which is located at Puza-e-Eshan and it is part of Puza-e-Eshan research farm at this land rice has never been cultivated. This land was too unlevelled and it has sandy soil.



This is the end of winter season and this land is full of reeds but it looks dry /Yellow as you are seeing on the pictures because at this season all the weeds are getting dry/Yellow: The picture on the left: it shows how reeds has strong root and it is really a deep root system weeds.

Sher Jan one of AKF NRM officer he is trying to remove the reeds from soil but he couldn't do it because the root is very deep. The picture on the right: Tractor is leveling the land.



The above pictures show land preparation as the land was unlevelled therefore it requires for good leveling. The picture on the left: PMIS hired labors to level the land so they are leveling it by shovels and basket. The picture on the right: show this land is full of weeds especially **Kabal** (Kabal is a Dari word) this weed is a dangerous weed when it cuts in to pieces it multiplies it has long roots and finally it covers the ground very soon.

And the pictures between left and right labors are collecting the weeds. Look at to the mass of weeds! In next year if AKF will cultivate any crops at this amount of 1hectar land it won't need as much work as we do this year. So this land is prepared for cultivating any crop in the future but is wasn't like this before.



The above pictures indicates SRI land preparation, the man who is on the left he is building ridges for SRI and non-SRI plots and the right picture show how the reed is growing fast? Reed is also a deep system root weeds it is very difficult to destroy this weed from its roots. As reed grows at the swamp it seems here also was drain in the past and now some part of this Baghlan Agriculture research farm has drain too.



As at the method in system of rice intensification it is ideal to mark the land or plots before starting transplantation because at the mentioned method this marking creates 25 cm squares and the space between each single seedling will be 25 cm and we must transplant the young single seedling which is from 8-days to 13 -days on the each intersection.

The picture on the left which is above it is one of the Jangharoq SRI volunteer farmers he learned how to do marking while PMIS/SRI team did the marking and guides the SRI volunteer farmers at the AKF farm then farmers will go their farm they might do the marking with out presence of SRI team but for insuring we went through to them and carried out the marking at their farms too. The picture on the right it shows when we mark the land it should be wet or must have a slight layer of water but it depends to the soil condition. Look at the picture on the left how AD representatives and SRI volunteer farmers are gathered and watching the marking process.



The above picture on the left it shows that just the plot has evacuated from water and he is doing the marking. While the marking has been completed we called the participants to come close the SRI nursery then they came and they are standing around the nursery seedbed. At first we explained what is the age of this SRI seedling? What age we should transplant the seedling of SRI? What is the best age in system of rice intensification that should be planted as it experimented? It explained how to remove the seedlings from seedbed at the time of removing the roots shouldn't harm. The person who transplants he should remove the seedlings very carefully by a plate in order to don't harm the roots.



Finally we start transplantation before transplanting, we briefly explained very precisely to the participants how to transplant, one single seedling should be transplanted and where to transplant? Of course the single seedling should be transplanted on intersection because if we lose the intersection and transplant this side and that side not at the appropriate space which is intersection then our transplanted seedling after 10 days at the first Weeding it will be destroyed or cut by Mandava weeder Therefore we must be very careful of transplantation to transplant it at the appropriate place which is intersection in order to prevent the destroying or damaging of the plant at the first SRI Weeding.

The picture on the left one of SRI team member is transplanting SRI at the presence of participants whom they are SRI volunteer farmers and AD representatives we explained to them how to transplant and participants are watching SRI transplantation with very enthusiasm and it is surprise able for them. They learned how to transplant then we asked participants who learned and participate at the transplantation voluntary, the first one who learned among the participants and take part voluntary that is Mr. Muhammad Rasul Khan(the picture between and who has grey hair from right the second person) deputy of Baghlan province Agriculture department head. He is very interested to system of rice intensification.

The invited people feed backed us and they said as we saw to day system of rice intensification is a really good methods but we will see it at our own farms we hope it will give good results as it gave its results in other countries. It really safes water which is a vast benefit for down stream area and finally to all farmers who are along the canal. Seed saving is another benefit we soak 21-28 Kg seed for one Jerib land /2000 Square meters but SRI needs for the same amount of land 1 Kg which is a big different and it is very fantastic. At traditional method we transplant one bunch also the age of seedling is 35-40 but at SRI practice We need to transplant at the space of 25 cm one single seedling at the age of 8-12 days.

And it produces more than 50 tillers.

The picture on the right all SRI volunteer farmers and Agriculture department representatives are taking part at transplanting as it is too clear on the picture.

Then SRI team went through to the farmers' field and did transplantation jointly.