

Madrasah sa Basak: Participatory Field School for Meranao Rice Farmers

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Madrasah Sa Basak is a Meranao term for field school, madrasah meaning school and basak a lowland paddy or a rice farm.

The technologies generated by scientists nowadays are so numerous that rice industry anywhere can be improved sufficiently. For its part, the Philippines should have an advantage over other rice producing countries due to the presence of the International Rice Research Institute in Laguna. Nevertheless, rice farming in Lanao is backward, in spite of the advances in neighboring provinces. Some factors of high farm productivity such as high yielding varieties,

certified seeds, straight row planting, proper fertilizer management, integrated pest management and many others are not popular among Lanao farmers. Uncultivated barren lands and monocropping are widespread. All of these realities are attributed to poor technology transfer. The establishment of the Philippine Rice Research Institute (PhilRice) and the eventual creation of MSU-PhilRice triggers the advent of improved technologies to the Lanao rice farms, yet production in these farms is still far from the optimal potential production level based on the prevailing land resources. It is interesting to note that in the 70's, when traditional farm practices were common elsewhere, Lanao was supplying rice as far as Butuan. Nowadays, Muslim millers acquire palay from Bukidnon, Butuan, Surigao, Davao, Cotabato and Zamboanga.

The cultural features of the Meranaos have aggravated the problem of slow techno transfer. Their resistance to changes started during the period of colonialism and continue this time. However, their traditional attitudes of dominance and pride are being "conquered" by humility, respect and credibility in those who are involved in islamic preachings and have these qualities.

The Madrasah Sa Basak designed to promote a rapid technology transfer, is founded on the principles of "To See is to Believe" and "Learn by Doing." It is anchored on a training team selected by virtue of its involvement in religious undertakings. The school has six work components on-farm training, post-training and take-home seed, techno demonstration, weekly field meetings, weekly radio broadcast and barangay seed production. It has been identified as the flagship project of MSU-PhilRice in line with the Mindanao Rice Research and Development Program of the government.

Objectives

General Objectives

1. To provide rapid technology transfer;
2. To advocate the hidden values of farming and the benefits from an improved farming systems.

Specific Objectives

1. To introduce high-yielding varieties and good quality seeds;
2. To showcase the straight row planting, integrated nutrient management and integrated pest management;
3. To increase the frequency of cropping and land utilization.

Components of the Field School

On-Farm Training

Groups of farmers aged 23-49 are organized in strategic places. The presence of irrigation and accessibility are given preference. The most credible leaders either from the local government, clan, agama or religious sectors are consulted during the participatory rapid appraisal and planning sessions. The venue, schedule and duration of the training are decided by the group. However, the maximum length of training is two days.

The trainings are done informally with the training team in farmers attire. The medium of instruction is in the vernacular. The topics are: values education and islamic concepts on farming, seeds and seeding, tillage, transplanting and water management, integrated nutrient management, integrated pest management, harvesting and post harvest technology. The training team is responsible for the food preparation so that the host is not disturbed. No certificate of attendance is awarded at the end of the program.

Post-Training Take Home Seed

Each participant is given one kilogram of good quality seed to be planted at a portion of his farm. He is encouraged to follow the technologies they have learned from the lectures. Announcement is made to reward the highest yielding plot.

Technology Demonstration

For every cluster, one of the participants is selected as a cooperator of the demo. The *Gintong Ani* Guidelines is used in the selection. The demo plot ranges from one fourth to one third of a hectare. The participants meet once a week at this site for the laboratory component. The application of the *Gintong Ani* Steps in rice production is demonstrated. All plots are properly labeled. Each site is planted with three varieties. All required agricultural supplies are provided by the field school. The training team is always involved in the farm operations.

Weekly Field Meeting

At a designated time and day, the class meets at the site once a week. Actual work is done by the participants. The progress and response of the crops to any treatment is actually observed. The topic that attracts more interest is integrated pest management.

Weekly Radio Broadcast

The radio program of one hour every week consists of lectures about the rice industry. However, the prevailing problems and issues observed during the weekly field visits are given emphasis. Questions that are raised by any farmer are discussed over the radio if these have wider applicability.

Barangay Seed Production

This component is included in view of the absence of local

seed grower. It is also designed to augment the seed requirement of the cluster group. The size ranges from one-half to one hectare. Foundation seeds and fertilizer are provided the selected cooperator. The seed expert of the school supervises this component.

Strategies of the Field School

Clustering into Small Groups

The size of the class is considered a vital factor in the management of the field school. In Meranao society, each individual is a potential problem that can block the success of the project. Individual desire should be satisfied, hence a smaller group of about 30 participants is easier to manage and may require lesser time to unify for a common goal.

Participatory Learning

The main concern of the training is how to effect changes, not just lecture delivery. Hence, the process of learning is problem-oriented and participatory. Each participant is given more opportunity to relate his farming experiences, both successes and failures. The lectures use both the scientific and spiritual bases of a particular phenomenon. When the participants slow down in talking, the lecturers would start to talk.

Flexible Curriculum

The training module is centered on the 12 steps *Gintong Ani* for rice production. However, the discussion is focused on the prevailing problems based on the participants-lecturer interactions. In most of the sites, there are more interests on Integrated Pest and Nutrient Management. There are instances where discussions are diverted to other agricultural concerns.

Integration of Islamic Principles

A Meranao believes that religion is the purpose of his life. Consequently, the power of God is always associated with any undertaking, including farming. The extension agent should be credible also to enable him to win the confidence of the participant. Incidentally, those who have strong religious affinity command a high degree of respect and credibility among the people. Due to ability of the lecturers to link divine interference with the scientific bases of many phenomena such as pest incidence, disease epidemic and calamity, the farmers can easily believe.

The integration of islamic principles is intended for social as well as economic reform. For instance, the failure of the farmer to give charity to the poor after a bountiful harvest, causes the displeasure of God Who may create more rats to invade the rice field in the next crop season.

Credibility build-up is very crucial in winning the cooperation of the people. The training team portrays maximum honesty and sincerity in dealing with the farmers. There is no gift accepted from the farmers. A complete set of cooking utensils is kept in the car so that the hosts are not burdened by serving food to the lecturers. There are no failures in the techno demo except the occurrence of uncontrolled calamities. Otherwise its credibility would be lost.

Conclusion

There is a promise in promoting technology transfer among the stubborn clienteles and neglected farmers. The apparent difference between the farmers field and the techno demo and the frequent demand to repeat the training process are among the indications of the success of the school. However, the Madrasah has covered only a very small proportion of the Meranao farmers, so far. Many of them are waiting for their turn.

Table 1 Summary of Techno Demo (Madrasah Sa Basak) during the 2001 Wet Season

| Location (Cooperator) | Varieties | Sowing Date | Transplanting Date | No. of Prod. Tillers | Plant Height (cm) | Flowering (Days) | Maturity (Days) | Yield/Ha. (Kgs) |
|---|-----------|----------------|-----------------------|----------------------------|-------------------------|---------------------|--------------------|--------------------|
| 1. East Basak, Marawi City (Dibaratun Magompara) | PSBRc 64 | August 10 | September 5 | 16 | 99 | 94 | 124 | 4,100 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,200 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,600 |
| 2. Pangadapun Ramin (Macacuna Bongcarawan) | PSBRc 72 | August 12 | September 10 | 17 | 105 | 99 | 129 | 3,700 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,150 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,450 |
| 3. Matampay Bubong (Abduljabbar Rakiin) | PSBRc 64 | August 14 | September 12 | 19 | 99 | 94 | 124 | 3,900 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,180 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,365 |
| 4. Madanding Bubong (Amil Dimanga) | PSBRc 64 | August 16 | September 10 | 14 | 99 | 94 | 124 | 4,256 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,620 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,147 |
| 5. Polayagan Bubong (Calim Liwalug) | PSBRc 64 | August 17 | September 13 | 19 | 99 | 94 | 124 | 3,800 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,458 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,250 |
| 6. Bansayan Bubong (Nasser Batuaan) | PSBRc 78 | August 17 | September 14 | 17 | 94 | 96 | 126 | 4,310 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 3,960 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,300 |
| 7. Gamot Ramin (Ali Serad) | PSBRc 78 | August 18 | September 14 | 15 | 99 | 95 | 125 | 4,215 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,390 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,480 |
| 8. Dalaon Bubong (Jaime Solaiman) | PSBRc 78 | August 18 | September 15 | 12 | 99 | 94 | 124 | 3,700 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 4,320 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 4,130 |
| 9. Diolongan Bubong (Mujahid Multuba) | PSBRc 78 | August 19 | September 15 | 11 | 94 | 94 | 124 | 3,650 |
| | PSBRc 80 | | | | 87 | 92 | 122 | 3,980 |
| | PSBRc 82 | | | | 90 | 90 | 120 | 3,940 |
| 10. Buadi Puso Bantong (Usudan Macarasam) | PSBRc 78 | August 19 | September 16 | 14 | 94 | 82 | 128 | 4,113 |
| | PSBRc 80 | | | | 87 | 80 | 122 | 4,250 |
| | PSBRc 82 | | | | 90 | 80 | 120 | 4,400 |

Table 1 Continuation

| | | | | | | | | |
|---|----------|-----------|--------------|----|-----|----|-----|-------|
| 11. Adapun Ali, Balo-i (Tagoranao Sulog) | PSBrc 78 | August 20 | September 16 | 15 | 94 | 98 | 124 | 4,115 |
| | PSBrc 80 | | | 13 | 87 | 92 | 122 | 4,300 |
| | PSBrc 82 | | | 14 | 90 | 90 | 120 | 4,105 |
| 12. Dulay, Marawi City (Zainoden Alag) | PSBrc 64 | August 20 | September 17 | 17 | 99 | 96 | 126 | 4,440 |
| | PSBrc 80 | | | 16 | 87 | 94 | 124 | 4,250 |
| | PSBrc 82 | | | 15 | 90 | 90 | 120 | 4,500 |
| 13. Poona Bayabao, Lanao Del Sur (Asgar Cosain) | PSBrc 64 | August 21 | September 17 | 19 | 99 | 94 | 124 | 3,715 |
| | PSBrc 80 | | | 19 | 87 | 92 | 122 | 4,200 |
| | PSBrc 82 | | | 16 | 90 | 90 | 120 | 4,350 |
| 14. Diolongan Bubong (Disomimba, Mohamadali) | PSBrc 64 | August 21 | September 18 | 18 | 99 | 94 | 124 | 3,850 |
| | PSBrc 80 | | | 12 | 87 | 92 | 122 | 4,100 |
| | PSBrc 82 | | | 17 | 90 | 90 | 120 | 4,216 |
| 15. Diolongan Bubong (Jamaloding Baute) | PSBrc 64 | August 22 | September 18 | 17 | 99 | 94 | 124 | 3,740 |
| | PSBrc 80 | | | 13 | 87 | 92 | 122 | 4,450 |
| | PSBrc 82 | | | 18 | 90 | 90 | 120 | 4,390 |
| 16. O lango, Balo-i (Carim Mama) | PSBrc 72 | August 22 | September 19 | 16 | 99 | 93 | 123 | 3,960 |
| | PSBrc 80 | | | 14 | 87 | 91 | 121 | 4,385 |
| | PSBrc 82 | | | 19 | 90 | 89 | 119 | 4,540 |
| 17. Tower, Balo-i (Diongcot Sulog) | PSBrc 78 | August 23 | September 20 | 15 | 94 | 93 | 123 | 4,580 |
| | PSBrc 80 | | | 15 | 87 | 92 | 121 | 4,500 |
| | PSBrc 82 | | | 19 | 90 | 89 | 119 | 4,700 |
| 18. Diolongan Bubong (Pumbaya Maniri) | PSBrc 64 | August 23 | September 20 | 14 | 99 | 94 | 124 | 4,220 |
| | PSBrc 80 | | | 16 | 87 | 92 | 122 | 4,690 |
| | PSBrc 82 | | | 18 | 90 | 90 | 120 | 4,750 |
| 19. Bansayan Bubong (Nasser Batuaan) | PSBrc 72 | August 24 | September 21 | 13 | 105 | 94 | 124 | 4,210 |
| | PSBrc 80 | | | 17 | 87 | 92 | 122 | 4,440 |
| | PSBrc 82 | | | 17 | 90 | 90 | 120 | 4,630 |
| 20. Madanding Bubong (Aminola Mama) | PSBrc 64 | August 24 | September 21 | 12 | 99 | 94 | 124 | 3,870 |
| | PSBrc 80 | | | 18 | 87 | 92 | 122 | 4,430 |
| | PSBrc 82 | | | 18 | 90 | 90 | 120 | 4,525 |

Table 2 Summary of Techno Demo (Madrasah Sa Basak) during the 2002 Dry Season

| Location (Cooperator) | Varieties | Sowing Date | Transplanting Date | No. of Prod. Tillers | Plant Height (cm) | Flowering (Days) | Maturity (Days) | Yield/Ha. (K gs) |
|---|-----------|----------------|-----------------------|----------------------------|-------------------------|---------------------|--------------------|---------------------|
| 1. Diolongan, Bubong (Mahdi Multituba) | Triple A | January 12 | February 10 | 16 | 105 | 109 | 139 | 3,850 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 2. Bansayan, Bubong (Jalil Batuaan) | Alimona | January 13 | February 12 | 16 | 108 | 110 | 140 | 3,740 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 3. Bansayan Bubong (Nasser Batuaan) | Triple A | January 14 | February 10 | 16 | 105 | 109 | 139 | 3,970 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 4. Polayagan Bubong (Calim Liwalug) | Triple A | January 15 | February 13 | 16 | 105 | 109 | 139 | 3,458 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 5. Bansayan Bubong (Balao Mama) | Triple A | January 15 | February 13 | 16 | 108 | 109 | 139 | 3,870 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 6. Polayagan Bubong (Salem Montib) | Alimona | January 23 | February 20 | 16 | 105 | 109 | 139 | 4,112 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 7. Matampay, Bubong (Amil Dimanga) | Triple A | January 25 | February 23 | 16 | 105 | 109 | 139 | 3,980 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 8. O lango Balo i (Carim Asgar) | Triple A | January 25 | February 24 | 16 | 105 | 102 | 132 | 3,970 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 9. Matampay, Bubong (Ali Serad) | Triple A | January 26 | February 23 | 16 | 105 | 109 | 139 | 3,860 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |
| 10. Adapun Ali, Balo i (Tago Sulog) | PSBRc 72 | January 27 | February 24 | 16 | 102 | 102 | 132 | 3,500 |
| | PSBRc 80 | | | | | | | |
| | PSBRc 82 | | | | | | | |

Table 2 Continuation

| | | | | | | | | |
|---|----------------------------------|----------------|-------------|----------------|-----------------|-----------------|-------------------|-------------------------|
| 11. Matampay, Bubong (Mangayao Dimanga) | Triple A PSBRc 80 PSBRc 82 | January 27 | February 24 | 16 15 18 | 105 84 87 | 108 90 86 | 138 120 | 4,109 4,890 5,230 |
| 12. Madanding, Bubong (Aminola Mama) | Triple A PSBRc 80 PSBRc 82 | February 1 | March 4 | 16 15 18 | 105 84 87 | 108 90 85 | 138 120 115 | 3,949 4,970 5,500 |
| 13. Madanding, Bubong (AbduJabbar Rakiin) | Triple A PSBRc 80 PSBRc 82 | February 24 | March 20 | 16 15 18 | 105 84 87 | 108 90 86 | 138 120 116 | 4,210 4,800 5,890 |
| 14. Madanding, Bubong (Rakiin Mama) | Triple A PSBRc 80 PSBRc 82 | February 24 | March 22 | 16 15 18 | 105 84 87 | 108 90 85 | 138 120 115 | 3,807 4,980 5,120 |
| 15. Dulay, Marawi City (Zainoden Alag) | PSBRc 64 PSBRc 80 PSBRc 82 | February 24 | March 10 | 16 15 18 | 95 84 87 | 107 88 85 | 137 118 115 | 3,620 4,870 4,920 |
| 16. Diolangan, Bubong (Jaimee Solaiman) | PSBRc 64 PSBRc 80 PSBRc 82 | February 12 | March 10 | 16 15 18 | 95 84 87 | 108 90 85 | 138 120 115 | 4,040 5,420 5,600 |
| 17. Diolangan, Bubong (Disomimba Mohamadali) | Alimona PSBRc 80 PSBRc 82 | March 15 | April 10 | 16 15 18 | 108 84 87 | 108 90 85 | 138 120 115 | 3,390 4,760 4,940 |
| 18. Diolangan Bubong (Jamaloding Baute) | Alimona PSBRc 80 PSBRc 82 | March 15 | April 12 | 16 15 18 | 108 84 87 | 108 90 85 | 138 120 115 | 3,540 4,900 4,975 |
| 19. Diolangan, Bubong (Mujahid Multituba) | Alimona PSBRc 80 PSBRc 82 | March 16 | April 13 | 16 15 18 | 108 84 87 | 108 90 85 | 138 120 115 | 3,590 4,560 5,200 |
| 20. Madanding Bubong (Cosain Pangcoga) | Alimona PSBRc 80 PSBRc 82 | March 20 | April 18 | 16 15 18 | 108 84 87 | 108 90 85 | 138 120 115 | 3,609 4,980 5,120 |