Rice Crop Manager (Bangladesh) Version 1.0

The farmer should answer the questions for their plot for the season in which they will cultivate rice and desire recommended management practices.

1. Where is the plot?
   District: ________________  Upazila: ________________
   Union: ________________  Village: ________________

2. How do you name the rice plot for identification? ________________

A plot is one or more parcels with similar management, variety, and soil fertility.

3. What is the size of the plot?
   _____ decimals = _____ m²

4. For which upcoming season do you need a recommendation?
   O Boro  O Aman  O Aus

   If Boro, continue answering the questions in SET A.
   If Aus, continue answering the questions in SET B.
   If Aman, continue answering the questions in SET C.

SET A. If the selected season is boro season:

5. How many seasons will rice be grown in the plot this cropping year?
   O One  O Two  O Three

   If one rice crop per year,
   6a. What crop was grown before the upcoming boro?
       O Fallow, no crop  O Mustard  O Potato
       O Other crops

   If two rice crops per year,
   6b. What crop was grown before the upcoming boro?
       O Early aman  O Late aman  O Deep water aman
       O Mustard  O Potato  O Other crops

   If three rice crops per year,
   6c. What crop was grown before the upcoming boro?
       O Early aman  O Late aman  O Deep water aman

7. What variety will you grow for the upcoming boro?
   Name of the variety: ________________

   If variety selected is BRRI dhan28 type,
   8a. How will your crop be established in the upcoming boro?
       O Manual transplanting  O Wet seeding
If variety selected is BRRI dhan29 type and aman rice or other crop was previous crop or the plot was fallow before boro,
8b. How will your crop be established in the upcoming boro?
   O Manual transplanting   O Wet seeding

If variety selected is BRRI dhan29 type and potato or mustard was the previous crop before boro,
8c. How will your crop be established in the upcoming boro?
   O Manual transplanting   O Double transplanting

If manual transplanting and aman rice or other crop was previous crop or the plot was fallow before boro,
9a. When is rice sown in the nursery?

   Select a month:
   O November (Mid Kartik - Mid Agrahayon)
   O December (Mid Agrahayon - Mid Poush)
   O January (Mid Poush - Mid Magh)
   O February (Mid Magh - Mid Falgun)

   Select a week:
   O First (Third)     O Second (Fourth)   O Third (First)   O Fourth (Second)

   Note: Within parentheses, the week number is for the Bangla month. Do not select February when BRRI dhan28 type variety will be used.

If wet seeding and aman rice or other crop was previous crop or the plot was fallow before boro,
9b. When is rice sown in the plot?

   Select a month:
   O November (Mid Kartik - Mid Agrahayon)
   O December (Mid Agrahayon - Mid Poush)
   O January (Mid Poush - Mid Magh)
   O February (Mid Magh - Mid Falgun)

   Select a week:
   O First (Third)     O Second (Fourth)   O Third (First)   O Fourth (Second)

   Note: Within parentheses, the week number is for the Bangla month. Remove third week of December to second week of January for BRRI dhan28 type variety. Remove third week of December to February for BRRI dhan29 type variety.

If manual transplanting and potato or mustard was the previous crop before boro,
9c. When is rice sown in the nursery?

   Select a month:
   O December (Mid Agrahayon - Mid Poush)
   O January (Mid Poush - Mid Magh)
   O February (Mid Magh - Mid Falgun)
Select a week:
O First (Third)   O Second (Fourth)   O Third (First)   O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month. Remove February and third and fourth weeks of January from options when BRRI dhan29 type variety will be used.

If wet seeding and potato or mustard was the previous crop before boro (for BRRI dhan 28 type variety only),
9d. When is rice sown in the plot?

Select a month:
O January (Mid Poush - Mid Magh)
O February (Mid Magh - Mid Falgun)

Select a week:
O First (Third)   O Second (Fourth)   O Third (First)   O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month. Remove first and second weeks of January from options.

If double transplanting,
9e. When is rice sown in the nursery?

Select a month:
O November (Mid Kartik - Mid Agrahayon)
O December (Mid Agrahayon - Mid Poush)

Select a week:
O First (Third)   O Second (Fourth)   O Third (First)   O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month.

If transplanting,
10. How much seeds do you typically sow in the seedbed during boro?
   O Less than 4 kg per decimal of seedbed
   O More than 4 kg per decimal of seedbed

If transplanting,
11. How do you prepare your seedbed?
   O Raised bed
   O Flat bed

If manual transplanting and sowing date in the nursery is November (Mid Kartik - Mid Agrahayon) or December (Mid Agrahayon - Mid Poush),
12a. What is the expected age of seedlings at transplanting?
   O Less than 35 days   O 56-65 days
   O 35-45 days   O More than 65 days
   O 46-55 days
If manual transplanting and sowing date in the nursery is within first and second weeks of January (third to fourth weeks of Poush),
12b. What is the expected age of seedlings at transplanting?
   O Less than 35 days  O 46-55 days
   O 35-45 days  O 56-65 days

If manual transplanting and sowing date in the nursery is within third and fourth weeks of January (first to second weeks of Magh),
12c. What is the expected age of seedlings at transplanting?
   O Less than 35 days  O 46-55 days
   O 35-45 days

If manual transplanting and sowing date in the nursery is February (Mid-Magh to Mid-Falgun) for BRRI dhan28 type variety,
12d. What is the expected age of seedlings at transplanting?
   O Less than 35 days
   O 35-45 days

If selected variety is BRRI dhan28 type and the selected seedling age is older than 45 days,  
13a. Use of younger seedlings could increase plant vigor and yield. Can you instead use less than 45 days old seedlings?
   O Yes  O No

If selected variety is BRRI dhan29 type and the selected seedling age is older than 55 days,  
13b. Use of younger seedlings could increase plant vigor and yield. Can you instead use less than 55 days old seedlings?
   O Yes  O No

Ask for all conditions,
14. How much sun-dried, unmilled rice do you typically harvest from your ____ decimal plot in the boro season using selected/specifed or comparable variety with selected date of sowing?

   Grain yield in maund (1 maund = 40 kg): ____

If aman was the previous crop grown before this boro,  
15. What height of rice stems was left in your plot after harvest of previous rice crop?
   O Less than 4 inches
   O 4 to 10 inches
   O More than 10 inches

If aman or potato or mustard or other crop was the previous crop grown before this boro,  
16. Does your plot remain under water continuously for more than one month during the monsoon?
   O No  O Yes

   If no,
   What is the position of your plot in the landscape?
   O Higher lying area without flooding or sediment accumulation during the monsoon
   O Lower lying area where water from heavy rainfall accumulates but water does not stay
continuously for more than one month

If transplanting,
17a. Do you apply insecticide within one month after transplanting boro?
   O No       O Yes

If wet seeding,
17b. Do you apply insecticide within one month after sowing boro?
   O No       O Yes

18. How do you plan to control weeds in the upcoming boro? (Multiple answers can be selected.)
   O Hand weeding with hired labor
   O Hand weeding with family labor
   O Pre-emergence herbicide
   O Post-emergence herbicide

*If ‘Hand weeding with family labor’ was selected above, and ‘Pre emergence herbicide’ was not selected,*

Use of pre-emergence herbicide will reduce family labor for weed control. Do you agree to use pre-emergence herbicide?
   O Yes       O No

19. Which best describes the soil in your plot?
   O Sandy       O Loamy/Clayey

20. Will you apply organic materials to your _____ decimal plot this upcoming boro?
   O No       O Yes

*If yes,*
Select the organic materials to be applied in your _____ decimal plot and indicate the total weight of organic materials in kg.

<table>
<thead>
<tr>
<th>Organic material</th>
<th>Weight in kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>O Cow dung (decomposed)</td>
<td></td>
</tr>
<tr>
<td>O Poultry manure</td>
<td></td>
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<tr>
<td>O Vermicompost</td>
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<tr>
<td>O Compost</td>
<td></td>
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<tr>
<td>O Press mud</td>
<td></td>
</tr>
<tr>
<td>O Ash from cooking stove</td>
<td></td>
</tr>
</tbody>
</table>

*If transplanting,*
21. Will you use USG this upcoming boro?
   O No       O Yes

*If manual transplanting and “no” to number 21 or double transplanting or wet seeding,*
22. Which P-containing fertilizer will you use this upcoming boro?
   O TSP (0-46-0)
   O DAP (18-46-0)
If manual transplanting and “no” to number 21 or double transplanting or wet seeding,
23. Will you use the LCC for N management?
   O No  O Yes

   If yes,
   How often do you plan to take LCC readings during boro?
   O 1 or 2 times
   O 3 or more times

For the person operating Rice Crop Manager

Will you give the recommendation from Rice Crop Manager to a farmer interviewed with the questions?
   O Yes
   O No, it is a test recommendation and will not be given to the farmer

   If yes, proceed to page 13.

SET B. If the selected season is aus season:

5. How many seasons will rice be grown in the plot this cropping year?
   O One  O Two  O Three

If one rice crop per year,
6a. What crop was grown before the upcoming aus?
   O Mustard  O Potato  O Other crops

If two rice crops per year,
6b. What crop was grown before the upcoming aus?
   O Mustard  O Potato  O Boro rice
   O Aman rice  O Other crops

7. What variety will you grow for the upcoming aus?

   Name of the variety: __________________________

8. How will your crop be established in the upcoming aus?
   O Manual transplanting  O Mechanical transplanting
   O Direct dry seeding

If transplanting,
9a. When is rice sown in the nursery?

   Select a month:
   O March (Mid Falgun - Mid Chaitra)
   O April (Mid Chaitra - Mid Baisakh)
   O May (Mid Baisakh - Mid Jaistha)

   Select a week:
   O First (Third)  O Second (Fourth)  O Third (First)  O Fourth (Second)
Note: Within parentheses, the week number is for the Bangla month.

If direct dry seeding,
9b. When is rice sown in the plot?

Select a month
O March (Mid Falgun - Mid Chaitra)
O April (Mid Chaitra - Mid Baisakh)
O May (Mid Baisakh - Mid Jaistha)

Select a week:
O First (Third) O Second (Fourth) O Third (First) O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month.

If manual transplanting,
10. How much seeds do you typically sow in the seedbed during aus?
O Less than 4 kg per decimal of seedbed
O More than 4 kg per decimal of seedbed

If manual transplanting,
11. How do you prepare your seedbed?
O Raised bed
O Flat bed

If manual transplanting,
12. What is the expected age of seedlings at transplanting?
O Less than 20 days O 20-30 days O More than 30 days

13. Will you use supplemental irrigation for aus?
O No O Yes

14. How much sun-dried, unmilled rice do you typically harvest from your ____ decimal plot in the aus season using selected/specified or comparable variety with selected date of sowing?

Grain yield in maund (1 maund = 40 kg): ____

If rice was the previous crop grown before this aus,
15. What height of rice stems was left in your plot after harvest of previous rice crop?
O Less than 4 inches
O 4 to 10 inches
O More than 10 inches

16. Does your plot remain under water continuously for more than one month during the monsoon?
O No O Yes

If no,
What is the position of your plot in the landscape?
O Higher lying area without flooding or sediment accumulation during the monsoon
O Lower lying area where water from heavy rainfall accumulates but water does not stay continuously for more than one month

If transplanting,
17a. Do you apply insecticide within 15 days after transplanting aus?
   O No O Yes

If direct dry seeding,
17b. Do you apply insecticide within 20 days after sowing aus?
   O No O Yes

18. How do you plan to control weeds in the upcoming aus? (Multiple answers can be selected.)
   O Hand weeding with hired labor
   O Hand weeding with family labor
   O Pre-emergence herbicide
   O Post-emergence herbicide

   If ‘Hand weeding with family labor’ was selected above, and ‘Pre emergence herbicide’ was not selected,
   Use of pre-emergence herbicide will reduce family labor for weed control. Do you agree to use pre-emergence herbicide?
   O Yes O No

19. Which best describes the soil in your plot?
   O Sandy O Loamy/Clayey

20. Will you apply organic materials to your ____ decimal plot this upcoming aus?
   O No O Yes

   If yes,
   Select the organic materials to be applied in your ____ decimal plot and indicate the total weight of organic materials in kg.

   Organic material Weight in kg
   O Cow dung (decomposed) __________
   O Poultry manure __________
   O Vermicompost __________
   O Compost __________
   O Press mud __________
   O Ash from cooking stove __________

If transplanting,
21. Will you use USG this upcoming aus?
   O No O Yes

If transplanting and “no” to number 21 or direct dry seeding,
22. Which P-containing fertilizer will you use this upcoming aus?
   O TSP (0-46-0)
If transplanting and “no” to number 21 or direct dry seeding,
23. Will you use the LCC for N management?
   O No   O Yes

   If yes,
   How often do you plan to take LCC readings during aus?
   O 1 or 2 times
   O 3 or more times

For the person operating Rice Crop Manager

Will you give the recommendation from Rice Crop Manager to a farmer interviewed with the questions?
   O Yes
   O No, it is a test recommendation and will not be given to the farmer

If yes, proceed to page 13.

SET C. If the selected season is aman season:

5. How many seasons will rice be grown in the plot this cropping year?
   O One   O Two   O Three

If one rice crop per year,
6a. What crop was grown before the upcoming aman?
   O Jute   O Maize   O Legume
   O Potato   O Wheat   O Other crops
   O Oil seed crop   O Fallow, no crop

If two rice crops per year,
6b. What crop was grown before the upcoming aman?
   O Aus rice   O Boro rice sown before 1 February   O Boro rice sown 1 February or later
   O Jute   O Maize   O Legume
   O Potato   O Wheat   O Other crops
   O Oil seed crop

7. What variety will you grow for the upcoming aman?

   Name of the variety: ____________________

8. How will your crop be established in the upcoming aman?
   O Manual transplanting   O Mechanical transplanting
   O Direct dry seeding

If transplanting,
9a. When is rice sown in the nursery?

   Select a month:
If manual transplanting,
What is the anticipated manual transplanting date?

Select a month:
O June (Mid Joistha - Mid Ashar)
O July (Mid Ashar - Mid Srabon)
O August (Mid Srabon - Mid Bhadro)
O September (Mid Bhadro - Mid Awshin)

Select a week:
O First (Third)  O Second (Fourth)  O Third (First)  O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month.

If dry or wet seeding,
9b. When is rice sown in the plot?

Select a month:
O June (Mid Joistha - Mid Ashar)
O July (Mid Ashar - Mid Srabon)
O August (Mid Srabon - Mid Bhadro)

Select a week:
O First (Third)  O Second (Fourth)  O Third (First)  O Fourth (Second)

Note: Within parentheses, the week number is for the Bangla month.

If manual transplanting,
10. How much seeds do you typically sow in the seedbed during aman?
   O Less than 4 kg per decimal of seedbed
   O More than 4 kg per decimal of seedbed

If manual transplanting,
11. How do you prepare your seedbed?
   O Raised bed
   O Flat bed

If manual transplanting,
12. Will you apply supplemental irrigation?
   O Yes  O No
If yes, When will you apply supplemental irrigation? (Multiple answers can be selected.)
- At transplanting or sowing
- At active tillering
- At panicle initiation
- At flowering
- When needed

13. How much sun-dried, unmilled rice do you typically harvest from your ____ decimal plot in the aman season using selected/specified or comparable variety with selected date of sowing?

Grain yield in maund (1 maund = 40 kg): ____

If rice was the previous crop grown before this aman,
14. What height of rice stems was left in your plot after harvest of previous rice crop?
- Less than 4 inches
- 4 to 10 inches
- More than 10 inches

15. Does your plot remain under water continuously for more than one month during the monsoon?
- No
- Yes

If no,
What is the position of your plot in the landscape?
- Higher lying area without flooding or sediment accumulation during the monsoon
- Lower lying area where water from heavy rainfall accumulates but water does not stay continuously for more than one month

If transplanting,
16a. Do you apply insecticide within 15 days after transplanting aman?
- No
- Yes

If direct dry seeding,
16b. Do you apply insecticide within 20 days after sowing aman?
- No
- Yes

17. How do you plan to control weeds in the upcoming aman? (Multiple answers can be selected.)
- Hand weeding with hired labor
- Hand weeding with family labor
- Pre-emergence herbicide
- Post-emergence herbicide

If ‘Hand weeding with family labor’ was selected above, and ‘Pre emergence herbicide’ was not selected,
Use of pre-emergence herbicide will reduce family labor for weed control. Do you agree to use pre-emergence herbicide?
- Yes
- No
18. Which best describes the soil in your plot?
   O Sandy       O Loamy/Clayey

19. Will you apply organic materials to your ____ decimal plot this upcoming aman?
   O No       O Yes

   If yes,
   Select the organic materials to be applied in your ____ decimal plot and indicate the total weight of organic materials in kg.

   Organic material                 Weight in kg
   O Cow dung (decomposed)                  ______
   O Poultry manure                              ______
   O Vermicompost                              ______
   O Compost                                    ______
   O Press mud                                   ______
   O Ash from cooking stove                    ______

   If transplanting,
20. Will you use USG this upcoming aman?
   O No       O Yes

   If transplanting and “no” to number 20 or direct dry seeding,
21. Which P-containing fertilizer will you use this upcoming aman?
   O TSP (0-46-0)
   O DAP (18-46-0)

   If transplanting and “no” to number 20 or direct dry seeding,
22. Will you use the LCC for N management?
   O No       O Yes

   If yes,
   How often do you plan to take LCC readings during aman?
   O 1 or 2 times
   O 3 or more times

For the person operating Rice Crop Manager

Will you give the recommendation from Rice Crop Manager to a farmer interviewed with the questions?
   O Yes
   O No, it is a test recommendation and will not be given to the farmer

   If yes, proceed to page 13.
Information about the farmer

Name: ________________________________
National ID number (if any): _________________
Age: _________________
Gender: O Male     O Female

Mobile phone number (if any): ____________________
Entering your mobile phone number would enable you to receive SMS updates and advice during the season.

From whom did you learn about *Rice Crop Manager*?
O Department of Agricultural Extension (DAE)
O Union Information and Service Centre (UISC)
O Private Entrepreneur
O Bangladesh Rice Research Institute (BRRI)
O CSISA-Bangladesh
O Neighbors/relatives
O Others
   If others, please specify: ________

Information about the person operating *Rice Crop Manager*

Name: ________________________________

Do you reside in Bangladesh?  
O Yes     O No

*If yes,*  
Gender: O Male     O Female
Profession:  
   O Extension worker or agent
   O Farmer
   O Researcher
   O Loan officer
   O Fertilizer dealer
   O Union Information and Service Centre computer operator
   O Private entrepreneur
   O Others, please specify: _________________

Mobile phone number (if any): _________________

E-mail (if any): ______________________________________