

Rice-Wheat Crop Manager Eastern UP Version 1.0 (RWCM UP v1.0)

Rice-Wheat Crop Manager provides a farmer with personalized crop management recommendations for rice and wheat grown in both rainfed and irrigated rice-wheat cropping systems.

Instructions:

The farmer should answer the following questions for their field before the establishment of their next rice or wheat crop. If the farmer has more than one field, the questions should be answered separately for each field for which a recommendation is desired.

1. Where is the field?

District: _____

Block: _____

Village: _____

2. How do you name the field for identification? _____

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

3. What is the size of the field?

☐ _____ bigha

☐ _____ gatha

☐ _____ decimal

☐ _____ acre

If bigha, gatha, or decimal,

How many **selected field size unit** in 1 acre? _____

4. For which upcoming crop do you need a recommendation?

☐ Wheat

☐ Rice

If Wheat, continue answering the questions in SET A (pages 1-3).

If Rice, continue answering the questions in SET B (pages 4-5).

SET A. If the selected crop is wheat:

5. How will **wheat** be established?

☐ Zero tillage

☐ Conventional tillage, broadcast sowing

☐ Conventional tillage, line sowing

6. What **wheat** variety will you grow for the upcoming season?

Name of the variety: _____

7. When is **wheat** sown in the field?

Select a month:

☐ November

☐ December

Enter a date: _____

8. What **rice** variety was used in the last **kharif**?
Name of the variety: _____

9. How was the previous **rice** crop harvested?
☐ Manual ☐ Combine

If manual harvest,

- 10a. What portion of residue from your previous **rice** crop was retained in the field?
☐ Short standing biomass, < 10 cm height
☐ Tall standing biomass, 20 cm height

If combine harvest,

- 10b. How was residue from your previous **rice** crop managed?
☐ Standing biomass and straw retained in field
☐ Straw removed and standing biomass retained in field
☐ Standing biomass and straw removed after harvest
11. How many times do you plan to irrigate the **wheat** crop from establishment to harvest?
☐ 1 time ☐ 2 times ☐ 3 or more times
12. What kind of weeds predominates in your field during the **wheat** crop?
☐ *Phalaris minor* only
☐ Broadleaves
☐ Mix of broadleaves and grasses
☐ Not known
13. Did you apply zinc to the previous **rice** crop?
☐ No
☐ Yes, at less than 10 kg Zn sulfate/acre
☐ Yes, at 10 kg Zn sulfate/acre or more
14. What fertilizer sources in addition to urea will you apply to **wheat**?
☐ DAP (18-46-0) and MOP (0-0-60) ☐ SSP (0-16-0) and MOP
☐ NPS (20-20-0-13) and MOP ☐ NPK (12-32-16) and MOP
☐ NPK (14-35-14) and MOP ☐ NPK (10-26-26) and MOP
15. Has a soil test been obtained for the field in the past 2 years?
☐ No ☐ Yes

If yes,

What was the result for nitrogen (N)?

☐ Low ☐ Medium ☐ High

What was the result for phosphorus (P)?

☐ Low ☐ Medium ☐ High

What was the result for potassium (K)?

☐ Low ☐ Medium ☐ High

What was the result for zinc (Zn)?

☐ Low ☐ Medium
☐ High ☐ Not available

What was the result for boron (B)?

☐ Low ☐ Medium
☐ High ☐ Not available

For the person operating *Rice-Wheat Crop Manager*

Did you answer the questions through an interview of a farmer who wants to receive a recommendation?

☐ Yes
☐ No, the recommendation will not be given to the farmer

If yes, proceed to page 6.

SET B. If the selected crop is rice:

5. How will **rice** be established?
O Manual transplanting O Mechanical transplanting
O Wet seeding O Dry seeding

6. What **rice** variety will you grow for the upcoming **kharif**?
Name of the variety: _____

If manual or mechanical transplanting,

- 7a. When is **rice** sown in the nursery?

Select a month:

- O June
O July
O August

Enter a date: _____

If wet or dry seeding,

- 7b. When is **rice** sown in the field?

Select a month:

- O June
O July
O August

Enter a date: _____

If manual or mechanical transplanting,

8. What is the approximate seedling age at transplanting?
O 15-20 days O 21-30 days
O 31-40 days O Older than 40 days
9. What is the local unit used for yield of **rice**?
O Quintal O Mann
10. What yield of fresh, unmilled rice do you typically harvest from your **field size in local unit** field using **selected variety** or a comparable variety? Sum amounts of grain marketed, retained for household consumption, and provided to laborers.

If grain yield is expressed in quintal,

Grain yield: _____ quintal from **field size in local unit**

If field size is expressed in mann,

Grain yield: _____ mann from **field size in local unit**

Note: 1 quintal = 100 kg; 1 mann = 40 kg

11. In the past 5 years, how many years was your **rice** crop inundated by floods?
O Less than 3 O 3 or more

If manual or mechanical transplanting,

12a. How many times do you plan to irrigate the rice crop from transplanting to harvest?

- ☐ Never ☐ 1 or 2 times
☐ 3 or 4 times ☐ 5 times or more

If wet or dry seeding,

12b. How many times do you plan to irrigate the rice crop from sowing to harvest?

- ☐ Never ☐ 1 or 2 times
☐ 3 or 4 times ☐ 5 times or more

13. Does stagnant water in the field prevent harvest of rice in October?

- ☐ No ☐ Yes

14. What fertilizer sources in addition to urea will you apply to rice?

- ☐ DAP (18-46-0) and MOP (0-0-60) ☐ SSP (0-16-0) and MOP
☐ NPS (20-20-0-13) and MOP ☐ NPK (12-32-16) and MOP
☐ NPK (14-35-14) and MOP ☐ NPK (10-26-26) and MOP

15. Has a soil test been obtained for the field in the past 2 years?

- ☐ No ☐ Yes

If yes,

What was the result for nitrogen (N)?

- ☐ Low ☐ Medium ☐ High

What was the result for phosphorus (P)?

- ☐ Low ☐ Medium ☐ High

What was the result for potassium (K)?

- ☐ Low ☐ Medium ☐ High

What was the result for zinc (Zn)?

- ☐ Low ☐ Medium
☐ High ☐ Not available

What was the result for boron (B)?

- ☐ Low ☐ Medium
☐ High ☐ Not available

For the person operating Rice-Wheat Crop Manager

Did you answer the questions through an interview of a farmer who wants to receive a recommendation?

- ☐ Yes
☐ No, the recommendation will not be given to the farmer

If yes, proceed to page 6.

Information about the farmer

Given name: _____

Father's name/Mother's name/Husband's name: _____

Age:

☐ <30

☐ 31-40

☐ 41-50

☐ 51-60

☐ >60

Gender:

☐ Male

☐ Female

Mobile phone number (optional): _____

Email (optional): _____

Information about the person operating *Rice-Wheat Crop Manager*

Given name: _____

Father's name/Mother's name/Husband's name: _____

Do you reside in eastern UP, India?

☐ Yes

☐ No

If yes,

Gender:

☐ Male

☐ Female

Profession:

☐ Extension worker or agent

☐ Farmer

☐ Researcher

☐ Fertilizer dealer

☐ Others, please specify: _____

What is your organizational affiliation?

☐ BHU

☐ CSISA

☐ ICAR

☐ NDUAT

☐ Others, please specify: _____

Mobile phone number (optional): _____

E-mail (optional): _____