Contd.

Intervention: OFT 1

Integrated Crop Management

| Title of OFT | |
|--------------|--|
| Discipline | |

Problem diagnosed with

Crop/ Technology

Year of initiation

No. of locations

Treatments

Source of Technology

intensity

Farming situation

Agronomy Rainfed (Rainfall 435 mm in 17 days during July to October)

Groundnut

2017

5

TNAU, 2016 (VRI 8)

Technology Assessed

ANGRAU, 2013 (Dharani)

TO 2 : Cultivation of VRI8 (Drought tolerant, 105 days)

TO 3: Cultivation of Dharani (Drought tolerant, 110 days)

TO 1: Farmers practice: Cultivation of VRI 2 (1989, bold pods, bunch type)

Assessment of high yielding and drought tolerant varieties in Groundnut

Scanty or uneven rainfall (325 mm) during June to September

plants/Sq.m) & It led to yield loss to an extent of 30%.

Incidence of disease - Tikka leaf spot and root rot.

Heavy pest incidence of Spodoptera litura

Area (ha)

Less plant population due to poor germination of seeds by poor soil moisture (19

1 ha.

Season: Kharif

Observations recorded

Treatments

TO 1: Farmers

practice - VRI2

TO 2: VRI 8

TO 3: Dharani

| Particulars | VRI 2 | VRI 8 | Dharani |
|--|---------|-------|---------|
| Germination (%) | 74.8 | 76.5 | 77.0 |
| No.of plants/m ² (at Flowering) | 23.4 | 26.8 | 28.2 |
| No.of pods/plant | 28.4 | 37.0 | 35.2 |
| Duration of peg formation (days) | 54.4 | 51.6 | 52.2 |
| Whether continued/concluded | Conclud | ded | |

Net returns (Rs.)

30,120

54,020

49,580

B:C Ratio

1.69

2.38

2.25

Duration

(days)

109

105

112

OFT (1/5)

Any other parameter

Per day

productivity

(kg/day/ha)

16.8

22.2

21.3

Contd...

Results of continued / concluded OFTs

Yield (kg/ha.)

1843

2238 (21%)

2232 (21%)

- The general appearance of VRI 8 variety itself is very good, drought withstanding capacity is very well compared to local variety.
- ➤ Good drought tolerance observed in these two varieties, particularly Dharani at the early stage where long dry spell occurs (15 days).
- ➤ More number of pods is formed in the case of VRI 8.
- Market preference is somewhat less for VRI 8 variety.
- > CFLD 2017-18 conducted with Dharani and VRI 8 variety in 30 ha.

















Contd.

Intervention: OFT2

Season: Kharif

1 ha

Results of OFT

| JFIS | Ariyalur |
|-------------|----------|
| | |

| | Ĭ |
|--------------|---|
| Title of OFT | |

Farming situation

Crop/ Technology

Year of initiation

No. of locations

Treatments

Source of Technology

Discipline

Problem diagnosed with intensity

Agronomy

Irrigated

Fodder

2017

t/ha).

leaves.

Concluded

5

yield in green fodder

TNAU, 2001 (CO 27)

PANTCHARI, UP (PC 23)

Technology Assessed:

TO 2: Cultivation of CO 27 TO 3: Cultivation of PC 23

TO 1: Farmers practice: Cultivation of K 10

Palatability index is also high from PC 23 (83.4).

Assessment of suitable single cut fodder sorghum varieties for rainfed condition

• Unaware about rainfed fodder and importance of fodder

Area (ha)

• PC 23 variety is better in growth and biomass production related parameters.

PC 23 variety recorded the highest yield of 31.6 t/ha and it was followed by CO 27 (27.8

• The palatability index is moderate for local variety due to the hairy structure in stem and

• The PC 23 variety recorded the highest net return of Rs.33,740 with the BCR of 3.5.

Low income from animal components due to scarcity of fodder in rainfed condition

Non adoption of improved cultivation practices and low yielding variety also reason for low

Whether continued / concluded

Observations recorded

| Results of OFTs | OFT (2/5) | Ariyalur KVK | | | | |
|--|---------------------|--------------|-----------|-----------|--------------|--|
| Treatments | Viold (+/ha) | Net returns | B:C Ratio | Any other | er parameter | |
| rreatifients | Yield (t/ha) | (Rs.) | D.C Ratio | Palatal | oility index | |
| TO 1 : Farmers Practice (K 10) | 18.2 | 53,500 | 2.0 | | 68.4 | |
| TO 2 : CO 27 | 27.5 (51 %) | 85,500 | 2.8 | | 81.6 | |
| TO 3 : PC 23 | 36.3 (99 %) | 1,03,900 | 3.5 | | 83.4 | |
| | | | | | | |
| Remarks/Feedback | | | | | | |
| The PC 23 variety has dark green leaves. Under rainfed situation PC 23 and CO 27 has produced more quantity of green fodder and animals also like the taste of this fodder compared to local variety PC 23 can be taken for FLD programmes and further popularization. | | | | | | |
| | | | | | Contd | |











Contd.

Intervention: OFT 3

Season: Kharif

1 ha

Assessment of the performance of leaf curl virus resistant Tomato hybrids

when compared to the potential yield of upto 90 t/ha in Tomato hybrids.

TO 1: Farmers practice: Cultivation of VRN 3348 (Private hybrid)

• The market preference is slightly less for Arka Rakshak - oval and light red

• Yield loss to the tune of 40% due to Tomato leaf curl virus, bacterial wilt and early blight (30%)

• Low yield due to the cultivation of low yielding hybrids susceptible to LCV disease -40.5 t/ha

Area (ha)

Arka Rakshak hybrid recorded the yield of 54.3t/ha and it was followed by COTH 3 (50.3t/ha).

Arka Rakshak tomato hybrid recorded the highest net return of Rs.2, 85,350 with the BCR of

• Incidence of Leaf curl disease is very less in Arka Rakshak (0.9 %) compared to COTH 3 (1.1 %)

| Title of OFT | |
|--------------|--|
| _ | |

Discipline

Farming situation

Horticulture

incidence.

• Fruit borer damage.

Technology Assessed:

TO 2: Cultivation of COTH 3

TO 3: Cultivation of Arka Rakshak

and farmers practice (8.0%).

• Fluctuation in the market price.

TNAU (COTH 3) and IIHR (Arka Rakshak)

Irrigated

Tomato

2017

4.01

Concluded

3

Problem diagnosed with intensity

Crop/ Technology Source of Technology Year of initiation No. of locations

Treatments

Observations recorded

Whether continued/concluded

2,58,450

2,85,350

(10%) 54.3

(19%)

3.72

4.01

1.1

0.9

TO 3: Arka Rakshak

TO 2: COTH 3

- Remarks/Feedback
 Market preference is slightly less for Arka Rakshak as the colour of the tomato is light red and colour of the COTH 3 tomato is deep red.
- The consumer's preference was good for round shaped tomato
- COTH 3 than the Arka Rakshak which is slightly oval shaped fruit.

 More number of fruit (82 fruits per plant) is found in the case of
- Arka Rakshak hybrid than the COTH 3 (68 fruits per plant).

 Less incidence of leaf curl virus in both COTH 3 and Arka Rakshak.

68

82

Intervention

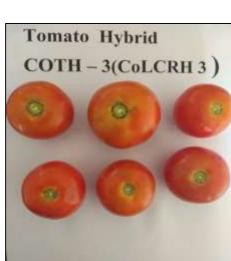
Control

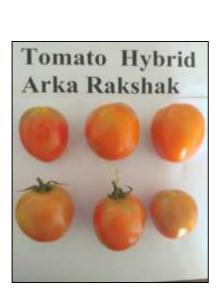
Ariyalur KVK













CSRB and Value addition is taken for transfer through various means)

Cashew (Seven technologies viz., Pruning, SWC, Manuring, Panchakavya spray, TMB management,

Sending text messages as when required scores high adoption percentage for all the seven

The average adoption percentage in the case of extension literatures is 46.3 % and periodical

Season: Kharif to Rabi

3 groups Area (ha) --
Technology Assessed:
TO 1: Farmers practice: Techno information delivered through literatures

technologies (average adoption 61.7)

voice messages was 36%

TO 2: Techno - information delivered through SMS

TO 3: Techno – information delivered through voice message

TNAU

2017

Concluded

Crop/ Technology

Year of initiation

No. of locations

Treatments

Source of Technology

Observations recorded

Whether continued / concluded

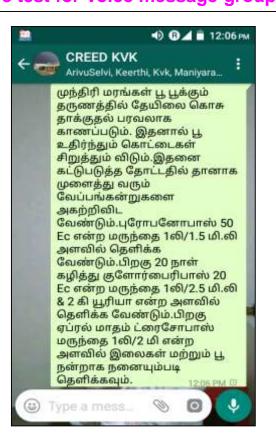
| Name of the | | TO 1 Extension Literature | | | | | TO 2 Text Message | | | | TO 3 Voice Message | | | |
|--------------|-------|---------------------------|----|-----|--------------------------|------|-------------------|-----|--------------------------|-----|-------------------------------------|-----|----|--|
| | | No. of Participants - 25 | | | No. of Participants - 25 | | | | No. of Participants - 25 | | | | | |
| technologies | Class | Pre- know | | | -Test ledge | Pre- | | | Post-Test knowledge | | Pre-test Post-T knowledge knowle | | | |
| | | No. | % | No. | % | No. | % | No. | % | No. | % | No. | % | |
| Cashew | L | 19 | 76 | 12 | 48 | 17 | 68 | 3 | 12 | 17 | 68 | 8 | 32 | |
| production | М | 4 | 16 | 8 | 32 | 4 | 16 | 6 | 24 | 4 | 16 | 8 | 32 | |
| techniques | Н | 2 | 8 | 5 | 20 | 4 | 16 | 16 | 64 | 4 | 16 | 9 | 36 | |

| Technology | Adop | tion perc | | Average | | | | | |
|-----------------------------------|---------|-----------|----------|-------------|-------------|------|-------------------|--------------------|-------------------|
| delivery mechanism | Pruning | swc | Manuring | Panchagavya | TMB mgt. | CSRB | Value addition | Average adoption % | yield (kg/ha.) |
| TO 1 : By Extension Literature | 52 | 48 | 64 | 44 | 52 | 60 | 4 | 46.3 | 511 |
| TO 2: By Text Message | 88 | 68 | 64 | 72 | 72 | 60 | 8 | 61.7 | 572 |
| TO 3 : By Voice Message | 40 | 52 | 40 | 32 | 44 | 36 | 8 | 36.0 | 478 |

Remarks/Feedback

- > Text messages are better source of information as it could be retrieved at any time and referred.
- > Remembering the technologies by the farmers when it comes through voice is difficult.
- > The high adoption percentage in the case of text message is high as the farmers can retained and refer as and when they need.







Post test for Text message group



High somatic cell count in milk (> 3.5 lakhs)

Poor self life of milk

TANUVAS, 2016

Technology Assessed

Mastiguard

check.

Concluded

2017

5 animals

Productivity of the cow declined

Mastitis prevention in Dairy cow

Problem diagnosed with

Crop/ Technology

Year of initiation

No. of locations

Treatments

Source of Technology

Observations recorded

Whether continued/concluded

intensity

• Incidence of subclinical mastitis (15% of cows coming to dispensary)

and going for treatment only after occurrence of clinical mastitis.

check SCC Kit for subclinical mastitis identification TANUVAS, 2016)

TO 2: Use of teat dip with disinfectant solution KMNO₄ (TANUVAS, 2012)

whereas it was 45,000 in the case of Masti guard used animals

TO 1: Farmers practice: Farmers are not using teat dip regularly, not detecting subclinical mastitis,

Mastitis screening package. It contains Teat protect antiseptic for udder spray and TANU

• The somatic cell count in the case of animals not treated was more than 2.4 lakhs (TO 1)

• Cost of treatments went upto Rs.3500 in the case of animals not treated with KMNO₄ or

• About 17% increased milk yield was observed in the case of Mastiguard treated animals over

TO 3: Masti guard to control mastitis (Mastiguard is the combination of Teat protection and

Season: Nov.2017-Mar.2018

Contd...

| Ariy | val | lur | K۷ | / |
|------|------------|-------|----|---|
| | <i>,</i> – | • • • | | |

| Parameters | Regular treatment (check) TO 1 | TO 2 | TO 3 (demo) |
|--|--------------------------------|-------------------------------------|------------------|
| Treatment materials used | No prevention measures | Teat cleaning with antiseptic usage | Mastiguard usage |
| Number of months under trial | 5 months | 5 months | 5 months |
| Number of Animals taken for trial | 10 | 10 | 10 |
| Incidence of Mastitis (No. of animals) | 3 | Nil | Nil |
| Somatic cell count (in lakh) | 2.4 | 0.8 | 0.45 |
| Cost of treatment (Rs.) /Trial/unit | 3500 | 200 | 300 |
| Milk yield in 5 months (lit.) | 1,020 | 1,065 | 1,200 |
| Gross cost (Rs./cow/5 months) | 12,100 | 11,350 | 11,800 |
| Gross income (Rs./cow/5 months) | 22,400 | 23,430 | 26,400 |
| Selling price /lit of milk (Rs.) | 22 | 22 | 22 |
| Net return/ 5 months (Rs.) | 10,300 | 12,080 | 14,600 |
| Benefit Cost Ratio | 1.85 | 2.1 | 2.2 |

Remarks/Feedback

- The farmers felt that using Mastiguard prevent their dairy animal from mastitis occurrence and save them from treatment cost of Rs.3,000-4,000 and reduces the chances of disease spread and they expressed their convenience in using teat protect.
- SCC kit for sub clinical mastitis identical should shows the result in less than five to ten minutes instead of 30 minutes.

Contd...







