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On Farm Trials 2015-16

On Farm Testing (Discipline-Wise Summary)

| Discipline | Crop/ Enterprise | Number of technology/ Social Concept | | No. of tria | ls | % of achieveme nt | Reasons for shortfall, |
|-----------------|-----------------------|---|---------|-------------|-------------|-------------------|------------------------------|
| | | Assessed | Refined | Target | Achievement | | if any |
| PBG | Rice(CAUR 3) | 1 | | 10 | ongoing | | Started in February |
| | Mustard | 1 | | 10 | ongoing | | Rabbi crop |
| | | | | | | | |
| Fisheries | Endemic minor carp | 2 | | 11 | 11 | 100 | |
| | | | | | | | |
| Home Science | Organic dye 1 | | | 5 | 5 | 100 | |
| Total | | 10 | 1 | 71 | 57 | | |

On Farm Testing (Discipline-wise achievements) Discipline: Horticulture

| Crop/ Enterp rise | Farmin g Situati on | Problem diagnose d | Techn ology/ Social Conce pt | Title of OFT | No. of trial s | Parameters on Assessment/ Refined (Pl. mention with tick) | Prdn. per unit | Net return (Rs/Ha) | B:C Ratio (GR/G C) |
|-------------------------|------------------------------|---|--|---------------------------------------|-------------------------|--|--------------------|--------------------------|-----------------------------|
| | | | | | | Technology | Technology | | |
| Garde n pea | Irrigate d | Farmers are unaware of high yield & prodn. in short duration | Pusa Shree | Varietal Trial of Pusa Shree | 5 | i)Plant ht75 cm ii)No. of branch/plant-7- 10 iii)Pod length- 6.3 cm iv)No. of pods/pl. 45-50 v)Days to maturity- 50- 55 days | Yield- 56 q/ha | 116500 | 3.3 |
| | | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | | i)Plant ht58 cm ii)No. of branch/plant-5-7 iii)Pod length- 7.2 cm iv)No. of pods/pl30-40 v)Days to maturity-60 - 65 days | Yield- 51q/ha | 104070 | 3.1 |

OFT: Horticulture

| Crop/ Enter prise | Farmi ng Situati on | Proble m diagno sed | Technolo gy/ Social Concept | Title of OFT | No. of trials | Parameters on Assessment/ Refined (PI. mention with tick) | Prdn. per unit | Net return (Rs/Ha) | B:C Ratio (GR/ GC) |
|-------------------------|------------------------------|--|--------------------------------------|------------------------------|---------------------|---|--------------------|------------------------------|-----------------------------|
| | | | | | | Technology | Technology | | |
| Cabba ge | Irrigat ed | Farmer s are unawa re of prodn. In short duratio n | Pusa Cabbage hybrid 1 | Varietal trail of cabbage | 5 | 1. Head wt- 0.985 gm 2. Days to maturity - 50-60 | Yield-389 q/ha | 307045 | 4.7 |
| | | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | | Head wt- 1.35 kg Days to maturity- 65-75 | Yield- 400q/ha | 317915 | 4.9 |

On Farm Testing (Discipline-wise achievements) Discipline: Plant Protection

| Crop / Enterp rise | Farmin g Situati on | Proble m diagnos ed | Technolog y/Social Concept | Title of OFT | No. of trial s | Parameters on Assessment/ Refined (PI. mention with tick) | Prdn. per unit | Net return (Rs/Ha) | B:C Ratio (GR/ GC) |
|--------------------------|------------------------------|------------------------------|--|--|-------------------------|--|-------------------|--------------------------|-----------------------------|
| | | | | | | Technology | Technolog y | | |
| Sugarca ne | Rainfed | Shoot borer Termite | Shoot borer and termite mgmt. with Thiamethoxa m@ 200gm a.i/ ha and Metarhizium anisophilae @ 500gm/ha (ctu 109/gm | Shoot borer and termit e mgnt | 8 | Percent early shoot borer damaged 30 DAP =12 ,60 DAP =7 90 DAP=3 Termite mound 30 DAP =13 ,60 DAP =6 90 DAP =2 ,Yield =384 Farmers Imidachloprid 70 % wp @ 200gm a.i/ha Termite mound 30 DAP =11 60 DAP =9 90 DAP =8 ,Yield =350 | 384 quintal | 1,62,000 | 2.93 |
| Onion | Rainfed | Purple blotch | Mgmt. of purple blotch of onion with Hexaconazol e 0.005% | | 8 | % of infection level at 30 DAT =12,60 DAT = 15, 90 DAT =4 Farmers Practice Mancozeb 75% @ 0.25% % infection level 30DAT=20,60 DAT=15,90 DAT=10 | 174 quintal | 178882 | 3.17 |

On Farm Testing (Discipline-wise achievements) Discipline: ANIMAL SCIENCE

| Livestoc k | Proble m diagno sed | Technolog y/Social Concept | Title of OFT | No. of trial s | Parameters on Assessment/ Refined (Pl. mention with tick) | Prdn. per unit livestock/enter prise | Net return (Rs/Unit | B:C Ratio (GR/G C) |
|---------------|---|--|---|-------------------------|---|--|---------------------------|-----------------------------|
| Broiler | Mortalit y % is high especiall y duing starter period | Coriandrum sativum seed powder are given @ 2% of feed | Growth performance of broiler by feeding coriandrum sativum seed powder | 5 | Technology i. Body weight of broiler at 6 wks -2.4 kg ii. Feed conversion efficiency –1.79 iii. Survibility%- 97.33 | Technology 2.4 kg/ bird | 69.38/bird | 1.45 |
| | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | i. Body weight of broiler at 6 wks -2.1 kg ii. Feed conversion efficiency – 1.6 iii. Survibility% - 89 | 2.1kg/bird | 47.54/bird | 1.23 |

On Farm Testing (Discipline-wise achievements) Discipline: ANIMAL SCIENCE

| Livestoc k | Proble m diagno sed | Technolog y/Social Concept | Title of OFT | No. of trials | Parameters on Assessment/ Refined (Pl. mention with tick) | Prdn. per unit livestock/ent erprise | Net return (Rs/U nit | B:C Ratio (GR/G C) |
|-------------------|-----------------------------------|----------------------------------|--|---------------------|---|--|-------------------------------|-----------------------------|
| Duck cum paddy | Practice of monocul ture | 300ducks per ha | Integrated duck cum paddy culture | 5 | Technology A.Effect on yield on rice i. no.oftiller/hill-11 ii.No. of grain/pannicle -150 B.Effect on insect population -90% reduction C. Effect on weed population — 95% D. Growth performance of duck at 6mnth- (1.7kg) | 5 MT yield of rice per ha 1.7kg live wt of duck | 95340 | 2.33:1 |
| | | | | | Farmer Practice (200 birds) | Farmer Practice (200 birds) | | |
| | | | | | A. Effect on yield on rice i.no.oftiller/hill- 10 ii.No. of grain /pannicle-130 B.Effect on insect population – 90% reduction C. Effect on weed population –90% reduction D. Growth performance of duck at 6mnth -(1.8kg) | 5 MT yield of ricep er ha 1.8kg live wt of duck | 69650 | 2.08:1 |

On Farm Testing (Discipline-wise achievements) Discipline: ANIMAL SCIENCE

| Livest ock | Problem diagnosed | Technolog y/Social Concept | Title of OFT | No. of trials | Parameters on Assessment/ Refined (Pl. mention with tick) | Prdn. per unit livestock/ent erprise | Net return (Rs/Unit | B:C Ratio (GR/G C) |
|---------------|---|--|--|---------------------|---|--|---------------------------|-----------------------------|
| Sow | Most common disease of sow at post parturition leading to mortality of piglet and sow | 48 lakh unit of Benzathine Penicillin is injected one week ahead of parturition | Treatment of Mastitis Metritis Agalactia complex syndrome in post partum Sow by using Benzathine Penicillin-48 lakh unit | 5 | Technology i. Litter size at birth (13.8) ii. Litter size at weaning (12.2) iii. Litter weight at birth (450g) iv. Litter weight at weaning (4800g) | 13.8 litters at weaning | 36000/litte r | 3.6:1 |
| | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | Technology i. Litter size at birth (12.8) ii. Litter size at weaning (6.8) iii. Litter weight at birth (418g) iv. Litter weight at weaning (4300g) | 6.8litter at weaning | 21000/ litter | 2.6:1 |

On Farm Testing (Discipline-wise achievements) Discipline: Fishery

| Livestock | Proble m diagnos ed | Technology / Social Concept | Title of OFT | No. of trial s | Parameters on Assessment / Refined (Pl. mention with tick) | Prdn. per unit livestock/enterp rise | Net return (Rs/Unit | B:C Ratio (GR/GC) |
|--|--|---|---|-------------------------|--|--|------------------------|----------------------|
| Bangana devdevi (endemic minor carp) | Unavaila bilit y of seed due to low survival of seed leading to low B:C ratio | Seed production of Bangana devdevi by stocking at the rate of 20,00000 spawn/ha | Seed production of Bangana devdevi (Khabak) | 5 | Technology i) Survivability of seed (30%) ii) Growth of seed (107mm in 3 months) iii) B:C ratio (5.27) | Technology 600000 fingerlings/ha | 972500/ha | 5.27 |
| | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | i) Survivability of seed (20%) ii) Growth of seed (102mm in 3 months) iii) B:C ratio (3.51) | 400000 fingerlings/ha | 572500/ha | 3.51 |

On Farm Testing (Discipline-wise achievements) Discipline: Fishery

| Livestoc k | Proble m diagno sed | Technolog y/Social Concept | Title of OFT | No. of trials | Parameters on Assessment/ Refined (Pl. mention with tick) | Prdn. per unit livestock/enter prise | Net return (Rs/Unit | B:C Ratio (GR/G C) |
|---|---|--|--|---------------------|--|--|---------------------------|-----------------------------|
| Osteobra ma belangeri (Endemic minor carp) | Low B:C ratio due to unaware ness of stocking densitie s and their ratios | Stocking of 10000 fingerlings per hacter in the ratio of 40:30:30 (Pengba: Grass carp: Silvercarp) | Culture of Osteobrama belangeri along with Chinese carps | 6 | Technology 1. Growth of fish in11 months Pengba – 187mm Grass carp – 480mm Silver carp - 415 mm 2. B:C ratio – 5.4 | Technology 4294.2kg/ha | 6,26,800/h a | 5.4 |
| | | | | | Farmer Practice | Farmer Practice | | |
| | | | | | 1. Growth of fish in11 months Pengba – 192mm Grass carp – 435mm Silver carp - 406 mm 2. B:C ratio – 4.2 | 2405.24kg/ha | 591240/ha | 4.2 |

On Farm Testing (Discipline-wise achievements)
Discipline: Home Sc.

| D130 | PIIII | <u> </u> | 10 30. | | | | |
|--|--|--|---|-------------------------|--|--|---|
| Crop/ Livesto ck/Oth er enterpr ise | Problem diagnos ed | Technolog y/ methodol ogy/ Social Concept | Title of OFT | No. of trial s | Parameters on Assessment/ Refined (PI. mention with tick) | Results on selected Parameters | % increase/ Change in parameters (Remark) |
| Organic dye | Not aware of locally availabl e mordant | Natural dying | Improving colour fastness of cotton fabric with natural dye | 5 | Technology / methodology Colour fastness property, effect of mordanting | Technology / methodology 1.Acidic medium(Alpinia nigera + dye(250gm)) = reddish brown 2.Alkaline medium (Dye + citrus hystrix(heiribop) = golden brown 3.Neutral medium (Dye + water) = pale yellow Colour fastnes to washing-negligible change | By used of mordant a number of different shades of colours can be obtained from a single dye sources. |