

On Farm Trial

OFT 1

1) Title of Technology Assessed: Assessment of rice varieties for flour and market preference

2) Problem Definition:

During Scientific Advisory Committee meeting, Farmers requested to introduce the new rice variety suitable for flour making as well as market preference. Hence this assessment proposed with new rice varieties along with their practicing variety.

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	ASD 16
Technological option 2:	TRY 3
Technological option 3:	TPS 3

4) Source of technology: TNAU

5) Production system and thematic area: Market preference / Varietal evaluation

6) Performance of the Technology with performance indicators:

Village Kathalampati	Farmers practice - ASD 16				Technological option 1 – TRY 3				Technological option 2 – TPS 3			
	No. of productive tillers / m ²	No. of filled grains / panicle	1000 grain weight (g)	Seed yield (q/ha)	No. of productive tillers / m ²	No. of filled grains / panicle	1000 grain weight (g)	Seed yield (q/ha)	No. of productive tillers / m ²	No. of filled grains / panicle	1000 grain weight (g)	Seed yield (q/ha)
P.Deivendran	310	92	24	55	253	115	21	58	245	120	23	57
R.Niroja	315	96	24	52	248	115	20	57	259	109	20	52
G.Valli	306	93	22	54	240	105	21	54	245	95	22	50
P.Ramakrishnan	295	95	24	56	234	100	20	55	250	88	23	48

S.Avudaithai	298	93	23	53	245	110	23	56	255	110	22	50
MEAN	304.8	93.8	23.4	54	244	109	21	56	250.8	104.4	22	51.4

Economics

Village	Farmers practice -				Technological option 1 –				Technological option 2 –			
Kathalampatti	ASD 16				TRY 3				TPS 3			
Farmers' Name	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio
P.Deivendran	57750	25380	32370	2.28	60900	25380	35520	2.40	59850	25700	34150	2.33
R.Niroja	54600	25360	29240	2.15	59850	25300	34550	2.37	54600	25250	29350	2.16
G.Valli	56700	25320	31380	2.24	56700	25350	31350	2.24	52500	25300	27200	2.08
P.Ramakrishnan	58800	25350	33450	2.32	57750	25320	32430	2.28	50400	25400	25000	1.98
S.Avudaithai	55650	25340	30310	2.20	58800	25330	33470	2.32	52500	25360	27140	2.07
MEAN	56700	25350	31350	2.24	58800	25336	33464	2.32	53970	25402	28568	2.12

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Market preference for TRY 3 is good and sold at the market price of Rs.10.

Idly preparation is mainly depends on properties of flour. This fact is in line with TRY 3 rice.

Among the three rice varieties assessed for flour and market preference, TRY 3 recorded more number of filled grains of 109.

The test weight was least in TRY 3 indicating that the variety is relatively medium bold than other two varieties. The grain yield recorded was high in TRY 3 *i.e.* 56 q/ha which is 3.7 % higher than ASD 16 and 8.9 % over TPS 3.

The net return and B: C ratio was higher in TRY 3 compared to the other two assessed varieties.

8) Final recommendation for micro level situation

The yield recorded by TRY 3 is better than other two varieties.

TRY 3 is most suitable for idly making due its good flour properties.

9) Constraints identified and feedback for research

More quantities of seeds were required by the farmers because it is newly released one.

Seed production on TRY 3 may be done in larger scale

10) Process of farmers participation and their reaction

Farmers realized that TRY 3 is suitable for idly making and better choice of variety in the problem soils.

OFT 2

1) Title of Technology Assessed: Performance assessment of samai varieties

2) Problem Definition:

Area under minor millets decreasing day by day and farmers are using poor yielding varieties

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	Local
Technological option 2:	Paiyur 2
Technological option 3:	CO 3

4) Source of technology: TNAU

5) Production system and thematic area: Varietal evaluation

6) Performance of the Technology with performance indicators:

Village	Farmers practice - Local				Technological option 1 – Paiyur 2				Technological option 2 – CO 3			
	No. of productive tillers / plant	No. of grains / panicle	Test weight (g)	Seed yield (q/h a)	No. of productive tillers / plant	No. of grains / panicle	Test weight (g)	Seed yield (q/h a)	No. of productive tillers / plant	No. of grains / panicle	Test weight (g)	Seed yield (q/h a)
V.Thanuskodi	8	110	2.4	5.0	11	130	2.6	6.8	13	156	2.8	7.0

R.Savithri	7	105	2.3	4.5	10	125	2.5	6.5	15	160	2.9	7.1
R.Sumathi	8	112	2.5	5.0	12	140	2.7	6.7	15	158	2.8	7.2
N.Kanthalasamy	9	120	2.4	5.5	13	150	2.6	6.9	18	160	2.8	7.3
V.Shanmugam	9	115	2.4	5.0	12	135	2.6	6.7	16	150	2.8	7.0
MEAN	8.2	112.4	2.4	5.0	11.6	136	2.6	6.7	15.4	156.8	2.82	7.1

Economics

Village	Farmers practice -				Technological option 1 –				Technological option 2 –			
	Local				Paiyur 2				CO 3			
Farmers' Name	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio
V.Thanuskodi	4000	3000	1000	1.30	5440	3000	2440	1.81	5600	3000	2600	1.86
R.Savithri	3600	3000	600	1.20	5200	3000	2200	1.73	5680	3000	2680	1.89
R.Sumathi	4000	3000	1000	1.30	5360	3000	2360	1.78	5720	3000	2720	1.91
N.Kanthalasamy	4400	3000	1400	1.47	5520	3000	2520	1.84	5840	3000	2340	1.94
V.Shanmugam	4000	3000	1000	1.30	5360	3000	2360	1.79	5600	3000	2600	1.87
MEAN	4000	3000	1000	1.31	5376	3000	2376	1.79	5688	3000	2588	1.89

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

The test weight was more in CO 3 than other two varieties.

The grain yield recorded was high in CO 3 *i.e.* 7.10 q/ha which is 42 % higher than local variety and 6 % over Paiyur 2.

The net return and B: C ratio was higher in CO 3 compared to the other two assessed varieties.

8) Final recommendation for micro level situation

Samai was found low adaptability to adverse conditions and survival was also not good. The market preference of samai was less.

9) Constraints identified and feedback for research

Farmers are not willing to take up the crop due to less market value for samai and also it takes more labourer for cultivation.

10) Process of farmers participation and their reaction

Farmers opined that it takes more labourer for cultivation.

OFT 3

1) Title of Technology Assessed: IPT in Redgram

2) Problem Definition:

Lower yield due to improper planting method

Non adoption of foliar spray during flowering stage

Improper pest management practices

Transplantation in red gram is seldom practiced in Virudhunagar. Since, it is successful in Maharashtra, Karnataka and Andhra Pradesh hence proposed.

To produce healthy seedlings through portray method.

Ensuring optimum plant population through transplanting and crop establishment.

Seed drill sowing ensures proper placement of seeds in proper depth and better root growth.

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	Dibbling
Technological option 2:	Seedling raised in polybags and transplanting

4) Source of technology: UAS, Dharwad

5) **Production system and thematic area:** Production technology

6) **Performance of the Technology with performance indicators:**

Village	Farmers practice -				Technological option 1 -			
Palayampatti	Dibbling				Transplanting			
Farmers' Name	Plant population/ m ²	Root length at 20DAS	Shoot length at 20DAS	Seed yield (q/ha)	Plant population/ m ²	Root length at 20DAS	Shoot length at 20DAS	Seed yield (q/ha)
P.Rathinavel	10	15.1	27.2	680	11	22.3	33.6	720
K.Ravi	9	14.3	28.5	620	11	23.5	32.9	940
M.Pandi	8	15.2	27.1	740	12	21.9	33.8	800
M.Irulayee	8	15.8	26.9	610	10	23.2	33.6	840
P.Murugayee	8	15.4	27.6	720	11	22.8	34.1	860
MEAN	8.6	15.2	27.46	674	11	22.7	33.6	832

Economics

Village	Farmers practice -				Technological option 1 -			
Palayampatti	Dibbling				Transplanting			
Farmers' Name	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio
P.Rathinavel	40800	20200	20600	2.02	43200	24600	18600	1.76
K.Ravi	37200	20500	16700	1.81	56400	23500	32900	2.40
M.Pandi	44400	21200	23200	2.09	48000	23300	24700	2.06
M.Irulayee	36600	20500	16100	1.79	50400	24500	25900	2.06
P.Murugayee	43200	21000	22200	2.06	51600	25600	26000	2.02

MEAN	40440	20680	19760	1.95	49920	24300	25620	2.06
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7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

The plant population was higher with 11 /m² in transplanted crop indicating better crop establishment and consequently uniform crop stand.

The days to 50% flowering was 70 days and 74 days in dibbled crop and transplanted crop respectively.

The root and shoot lengths were better in transplanted crop

8) Final recommendation for micro level situation

The grain yields were 674 kg/ha in dibbled crop and 832 kg/ha in transplanted crop with an yield difference of 23.4%.

The net returns was highest in transplanted crop with higher B:C ratio.

9) Constraints identified and feedback for research

Medium duration redgram which is suited for transplanting need be evolved.

Redgram hybrid suited to dryland conditions will be more beneficial.

10) Process of farmers participation and their reaction

Production of seedlings in large quantities is a major constraint.

Cost of seedling production and cost of planting increases the production cost.

Transplanting needs care as the root growth is more and adequate care has to be taken while planting.

OFT 4

1) Title of Technology Assessed: Assessing the storability of onion bulbs

2) Problem Definition:

Bulb rot during storage and reduction in germination percentage

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	Local method of storage
Technological option 2:	Panipet method of storage

4) Source of technology: HAU

5) Production system and thematic area: Storage studies

6) Performance of the Technology with performance indicators:

Village	Farmers practice - Local method of storage			Technological option 1 – Panipet method of storage		
	Germination (%)	Time stored (hrs)	Disease Index (Grade for Bulb rot)	Germination (%)	Time stored (hrs)	Disease Index (Grade for Bulb rot)
Tmt.N.Sowndra selvam T.Veppangulam	72	152	III	85	185	II
Th.P.Kumar Kathalampatti	68	145	III	88	181	II
Th.C.Gurunathan Thiruvirundhalpuram	74	150	III	91	175	II
MEAN	71.3	149	III	88	180.3	II

Economics

Village	Farmers practice - Local method of storage				Technological option 1 – Panipet method of storage			
	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio
Tmt.N.Sowndra selvam T.Veppangulam	6500	5550	950	1.17	9900	6900	3000	1.43
Th.P.Kumar Kathalampatti	6000	5550	450	1.08	9850	6900	2950	1.42
Th.C.Gurunathan Thiruvirundhalpuram	6250	5550	700	1.12	9950	6900	3050	1.44
MEAN	6250	5550	700	1.10	9900	6900	3000	1.40

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

The germination percentage was noticed as maximum of 80% in the panipet method of onion storage.

The storage time was increased in the panipet method along with lesser incidence of diseases.

The net return and B: C ratio was higher in panipet method compared to local method of storage.

8) Final recommendation for micro level situation

Panipet method of storing onion seed bulb was good in duration of storage, keeping quality and minimum disease incidence compared to local method of storage.

9) Constraints identified and feedback for research

Rat interference is more while keeping the onion bulbs in the erected shed.

10) Process of farmers participation and their reaction

Farmers are very happy with the storage of onion seed bulb in the panipet method because of more keeping quality, duration of storage and minimum disease incidence.

OFT 5

1) Title of Technology Assessed: Performance assessment of French bean varieties

2) Problem Definition:

Farmers are cultivating old varieties which are poor yielder and fetches low market price.

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	A. Komal
Technological option 2:	A. Suvidha
Technological option 3:	A. Anoop

4) Source of technology: IIHR

5) Production system and thematic area: Varietal evaluation

6) Performance of the Technology with performance indicators:

	Farmers practice -				Technological option 1 –				Technological option 2 –			
	A. Komal				A. Suvidha				A. Anoop			
Farmers' Name	No. of primary branches /plant	No. of green pods /plant	Green pod length (cm)	Green pod yield (t/ha)	No. of primary branches /plant	No. of green pods /plant	Green pod length (cm)	Green pod yield (t/ha)	No. of primary branches /plant	No. of green pods /plant	Green pod length (cm)	Green pod yield (t/ha)

		nt				nt				nt		
R.Saravanaraj P.M. Puthupatti	3.93	13	13.24	16.8	3.9	16	15	17.5	4.2	18.5	16.8	17.1
V.Rajagopalakrishnan P.M. Puthupatti	3.85	14	12.55	15.8	3.8	15	14.8	16.5	4.15	18.2	15.4	16.7
V.Murugan Palayampatti	4.02	15	14.2	18	4.5	18	16	19.5	4.5	20	18.2	20
M.Ramamoorthy Palayampatti	3.9	12	13.25	17.5	4.1	17	15.8	18.5	4.05	19.8	17.4	19.5
N.Ramer Palayampatti	4	15	13	16.4	4	17	15	18	4	18.9	17.2	19.2
MEAN	3.94	13.8	13.25	16.9	4.06	16.6	15.32	18	4.18	19.08	17.00	18.5

Economics

Farmers' Name	Farmers practice - A.Komal				Technological option 1 – A. Suidha				Technological option 2 – A.Anoop			
	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio	Gross return (Rs./ha)	Cost of cultivation (Rs/ha)	Net return (Rs./ha)	B:C Ratio
R.Saravanaraj P.M. Puthupatti	50200	168000	117800	3.35	52500	192500	140000	3.67	51000	171000	120000	3.35
V.Rajagopalakrishnan P.M. Puthupatti	52400	158000	105600	3.02	51500	181500	130000	3.52	51500	167000	115500	3.24
V.Murugan Palayampatti	51000	180000	129000	3.53	53000	214500	161500	4.05	52000	200000	148000	3.85

M.Ramamoorthy Palayampatti	5350 0	175000	12150 0	3.2 7	52500	203500	15100 0	3.8 8	52000	195000	14300 0	3.7 5
N.Ramer Palayampatti	5000 0	164000	11400 0	3.2 8	52500	198000	14550 0	3.7 7	50500	192000	14150 0	3.8 0
MEAN	5142 0	169000	11758 0	3.2 9	52400	198000	14562 5	3.7 8	51400	185000	13162 5	3.5 5

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

At Virudhunagar block, three varieties were evaluated for their performance under irrigated condition.

The number of primary branches per plant recorded was 3.94, 4.08 and 4.18 respectively in A.Komal, A.Suvidha and A.Anoop.

The green pod yield was more in A.Anoop (18.5 t/ha) due to its yield contributing traits namely number of primary branches per plant, number of green pods per plant and green pod length were recorded more when compared to other varieties.

The next better variety was A.Suvidha with green pod yield of 18t/ha.

Even though the green pod yield was recorded more in A.Anoop, the net return and B: C ratio was higher in A.Suvidha due to higher market price of later said variety (Rs.11/kg) than the first one (Rs.11/kg).

8) Final recommendation for micro level situation

By considering the yield and market price both A.Anoop and A.Suvidha were recommended for cultivation.

9) Constraints identified and feedback for research

One of the farmers said that intensive care must be taken during the establishment of the crop. Otherwise not come up well in our area. Area suitable varieties were warranted and research may be undertaken on this area.

10) Process of farmers participation and their reaction

They realized that both A.Anoop and A.Suvidha were better choice of varieties in terms of yield and market price.

OFT 6

1) Title of Technology Assessed: Management of postpartum anestrus in cross bred cows

2) Problem Definition:

Low milk yield, high infertility rate and micronutrient deficiency.

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	Conventional method
Technological option 2:	Deworming and supplementation of TANUVAS mineral mixture
Technological option 3:	Deworming and supplementation of TANUVAS Area specific mineral mixture

4) **Source of technology:** TANUVAS

5) **Production system and thematic area:** Animal Nutrition

6) **Performance of the Technology with performance indicators:**

Farmers' Name	Farmers practice - Conventional method		Technological option 1 – Deworming and supplementation of TANUVAS mineral mixture		Technological option 2 – Deworming and supplementation of TANUVAS Area specific mineral mixture	
	Milk yield (lit/day)	Intercalving period (months)	Milk yield (lit/day)	Intercalving period (months)	Milk yield (lit/day)	Intercalving period (months)
P.Ulaganathan	16	18	16.3	15	16.8	15
R.Chandiveeran	13	18	13.4	15	13.7	15
P.Pandiammal	12.5	18	12.9	15	13.3	15
G.Palaniammal	14	18	14.2	15	14.6	15
G.Subathradevi	15	18	15.3	15	15.8	15
S.Sudarsan	12	18	12.2	15	12.8	15
A.Premavathi	18	18	18.2	15	18.4	15
D.Gurunathan	16	18	16.3	15	16.8	15
A.Ulaganathan	13	18	13.2	15	13.5	15
M.Rathika	8.5	18	8.8	15	9.1	15

V.Shanmugam	16	18	16.3	15	16.5	15
K.Karutharaj	15	18	15.5	15	15.8	15
S.Bharaniraj	13	18	13.4	15	13.6	15
P.Palanisamy	13.5	18	14	15	14	15
P.Lakshmi	7	18	7.3	15	7.8	15
J.Sahariya	10	18	10.3	15	10.3	15
S.Tamilarasi	12	18	12.5	15	12.5	15
S.Kamaraj	13	18	13.3	15	13.3	15
K.Manimegalai	15	18	15.5	15	15.5	15
C.Murugesan	11	18	11.3	15	11.5	15
M.Thanuskodi	13	18	13.5	15	13.5	15
P.Rathinavel	12	18	12.3	15	12.5	15
B.Meenammal	14	18	14.3	15	14.5	15
M.Kala	15	18	15.3	15	15.5	15
G.Bovakkal	12	18	12.5	15	12.5	15
MEAN	13.2	18	13.5	15	13.8	15

Economics

Farmers' Name	Farmers practice - Conventional method				Technological option 1 – Deworming and supplementation of TANUVAS mineral mixture				Technological option 2 – Deworming and supplementation of TANUVAS Area specific mineral mixture			
	Cost (Rs/day)	Gross return (Rs./day)	Net return (Rs./)	B:C Ratio	Cost (Rs/day)	Gross return (Rs./day)	Net return (Rs./)	B:C Ratio	Cost (Rs/day)	Gross return (Rs./day)	Net return (Rs./)	B:C Ratio

			ha)				ha)				ha)	
P.Ulaganathan	250	384	134	1.5 0	250	391.2	141.2	1.5 6	250	403.2	153.2	1.6 1
R.Chandiveera n	200	312	112	1.5 6	200	321.6	121.6	1.6 1	200	328.8	128.8	1.6 4
P.Pandiammal	170	300	130	1.7 6	175	309.6	134.6	1.7 7	175	319.2	144.2	1.8 2
G.Palaniammal	175	336	161	1.9 2	175	340.8	165.8	1.9 4	175	350.4	175.4	2.0 0
G.Subathradev i	200	360	160	1.8 0	200	367.2	167.2	1.8 3	200	379.2	179.2	1.9 0
S.Sudarsan	175	288	113	1.6 4	175	292.9	117.8	1.6 7	175	302.4	127.4	1.7 3
A.Premavathi	200	432	232	2.1 6	200	436.8	236.8	2.2	200	441.6	241.6	2.2 0
D.Gurunathan	200	384	184	1.9 2	200	391.2	191.2	1.9 6	200	403.2	203.2	2.0 2
A.Ulaganathan	200	312	112	1.5 6	200	316.8	116.8	1.5 8	200	324.0	124.0	1.6 2
M.Rathika	175	204	29	1.1 6	175	211.2	36.2	1.2	175	218.4	43.4	1.2 5
V.Shanmugam	200	384	184	1.9 2	200	396.0	196.0	1.9 8	200	396.0	196.0	1.9 8
K.Karutharaj	200	360	160	1.8 0	200	372.0	172.0	1.8 6	200	379.2	179.2	1.9 0
S.Bharaniraj	175	312	137	1.7 8	175	321.6	146.6	1.8 3	175	326.6	151.4	1.8 7
P.Palanisamy	200	324	124	1.6	200	336.0	136.0	1.6	200	336.0	136.0	1.6

				2				8				8
P.Lakshmi	125	168	43	1.34	125	175.2	50.2	1.40	125	187.2	62.2	1.50
J.Sahariya	150	240	90	1.60	150	247.2	97.2	1.65	150	247.2	97.2	1.65
S.Tamilarasi	150	288	138	1.92	150	300.0	150.0	2.0	150	300.0	150.0	2.0
S.Kamaraj	200	312	112	1.56	200	319.2	119.2	1.60	200	319.2	119.2	1.60
K.Manimegalai	200	360	160	1.80	200	372.0	172.0	1.86	200	372.0	172.0	1.86
C.Murugesan	175	264	89	1.51	175	271.2	96.2	1.55	175	276	101	1.58
M.Thanuskodi	200	312	112	1.56	200	324.0	124.0	1.62	200	324	124	1.62
P.Rathinavel	170	288	118	1.69	170	295.2	125.2	1.74	170	300	130	1.76
B.Meenammal	200	336	136	1.68	200	343.2	143.2	1.71	200	348	148	1.74
M.Kala	200	360	160	1.80	200	367.2	167.2	1.84	200	372	172	1.86
G.Bovakkal	175	288	113	1.65	175	300.0	125.0	1.71	175	300	125	1.71
MEAN	186	316	130	1.68	186	324	138	1.73	186	330	144	1.76

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

Deworming followed by supplementation of TANUVAS Area Specific mineral mixture increased the milk yield as well as reduced the intercalving period.

The net return and B: C ratio was higher when the milch cows were fed with area specific mineral mixture after deworming due to high milk yield.

8) Final recommendation for micro level situation

Area specific Smart mineral mixture was good and it is highly recommended for farmers use.

9) Constraints identified and feedback for research

Farmers are not aware about the use of mineral mixture.

10) Process of farmers participation and their reaction

Farmers were interested to use mineral mixture and also now enquiring about the availability and manufacturing

details etc.

OFT 7

1) Title of Technology Assessed: Assessment of different poultry breeds for backyard poultry

2) Problem Definition:

Low income through local breeds of poultry, by means of weight gain, no.of eggs & disease attack.

3) Details of technologies selected for assessment:

Technologies assessed	Details of technologies assessed
Technological option 1: (Farmers Practice)	Local breed
Technological option 2:	Cauvery breed
Technological option 3:	CARI Aseel breed

4) Source of technology: TANUVAS & CARI

5) Production system and thematic area: Poultry breed evaluation

6) Performance of the Technology with performance indicators:

	Farmers practice - Local	Technological option 1 – Cauvery breed	Technological option 2 – CARI Aseel breed

Farmers' Name	Adopt ability (%)	Body weight gain after 6 months (kg)	Egg production per year	Hatchability (%)	Adoptability (%)	Body weight gain after 6 months (kg)	Egg production per year	Hatchability (%)	Adoptability (%)	Body weight gain after 6 months (kg)	Egg production per year	Hatchability (%)
C.Anusiya	85	1.5	45	95	65	3.0	63	80	95	3.4	110	65
P.Jaya	82	1.3	42	92	70	3.2	65	75	93	3.5	100	60
G.Selvi	75	1.5	40	93	72	3.3	65	75	98	3.5	110	50
Varadhalakshmi	70	1.4	45	88	70	3.5	64	70	95	3.4	100	55
M.Ramalakshmi	73	1.3	40	85	75	3.5	60	73	95	3.5	110	65
P.Panchavarnam	81	1.2	43	85	60	3.5	60	74	96	3.5	120	50
A.Maruthayi	83	1.5	48	88	65	3.6	65	72	97	3.0	110	55
T.Mariyammal	72	1.5	45	86	75	3.0	68	70	93	3.4	100	50
S.Tamil Selvi	85	1.7	45	85	70	3.3	72	75	90	3.4	100	45
R.Rajakumari	78	1.6	52	89	70	3.2	75	73	98	3.1	115	50
C.Muthulakshmi	76	1.8	50	85	75	3.2	75	71	95	3.5	110	55
A.Lakshmi	70	1.5	45	78	72	3.2	70	75	94	3.5	100	53
K.Kannagi	75	1.7	50	80	72	3.5	70	70	95	3.5	115	52
M.Mahalakshmi	72	1.6	57	80	75	3.6	70	70	96	3.3	115	52
R.Selvi	75	1.5	58	85	75	3.5	75	72	95	3.4	115	56
A.Lakshmi	76	1.7	45	85	75	3.4	80	70	98	3.5	110	60
A.Lakshmi	81	1.8	45	85	70	3.3	80	70	92	3.0	110	65
M.Santhanavalli	80	1.8	44	80	65	3.5	89	75	90	3.3	110	65
S.Devi	70	2.1	40	86	60	3.6	92	80	91	3.0	115	50
A.Amirtham	70	1.8	45	75	60	3.5	92	78	92	3.1	115	60
MEAN	76.5	1.6	46.2	85.3	69.6	3.4	72.5	73.4	94	3.0	110	56

Economics

Farmers' Name	Farmers practice - Local				Technological option 1 – Cauvery breed				Technological option 2 – CARI Aseel breed			
	Gross return (Rs./ unit)	Gross cost (Rs./ unit)	Net return (Rs./ unit)	B:C Ratio	Gross return (Rs./ unit)	Gross cost (Rs./ unit)	Net return (Rs./ unit)	B:C Ratio	Gross return (Rs./ unit)	Gross cost (Rs./ unit)	Net return (Rs./ unit)	B:C Ratio
C.Anusiya	525	300	225	1.8	1179	300	879.0	3.9	1645	350	1295	4.7
P.Jaya	405	300	105	1.4	1095	300	795.0	3.7	1388	350	1038	4.0
G.Selvi	425	300	125	1.4	1115	350	765.0	3.2	1448	350	1098	4.1
Varadhalakshmi	435	300	135	1.5	1148	350	798.0	3.3	1365	350	1015	3.9
M.Ramalakshmi	395	300	95	1.3	1120	300	820.0	3.7	1448	350	1098	4.1
P.Panchavarnam	395	300	95	1.3	1120	350	770.0	3.2	1508	350	1158	4.3
A.Maruthayi	465	300	165	1.6	1175	350	825.0	3.4	1335	350	985	3.8
T.Mariyammal	450	300	150	1.5	1076	350	726.0	3.1	1365	340	1025	4.0
S.Tamil Selvi	480	300	180	1.6	1164	350	814.0	3.3	1365	340	1025	4.0
R.Rajakumari	500	300	200	1.7	1165	300	865.0	3.9	1388	330	1058	4.2
C.Muthulakshmi	520	300	220	1.7	1165	300	865.0	3.9	1448	330	1118	4.4
A.Lakshmi	450	300	150	1.5	1130	300	830.0	3.8	1388	350	1038	4.0
K.Kannagi	505	300	205	1.7	1190	350	840.0	3.4	1478	330	1148	4.5
M.Mahalakshmi	525	300	225	1.8	1210	350	860.0	3.5	1433	330	1103	4.3
R.Selvi	515	300	215	1.7	1225	350	875.0	3.5	1455	350	1105	4.2
A.Lakshmi	480	300	180	1.6	1240	300	940.0	4.1	1448	350	1098	4.1
A.Lakshmi	495	300	195	1.7	1220	300	920.0	4.1	1335	330	1005	4.0

M.Santhanavalli	490	300	190	1.6	1323	350	973.0	3.8	1403	300	1103	4.7
S.Devi	515	300	215	1.7	1364	350	1014.0	3.9	1365	330	1035	4.1
A.Amirtham	495	300	195	1.7	1344	350	994.0	3.8	1388	300	1088	4.6
MEAN	473	300	173	2.0	1188	330	858.0	3.6	1420	338	1082	4.2

7) Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

The adaptability was recorded more in CARI Aseel (94%) than the other breeds studied.

The gain in body weight after six months period was more in Cauvery (Cauvery) than the local and Aseel.

The egg laying capacity was found more in Aseel birds.

8) Final recommendation for micro level situation

CARI Aseel was found high adoptability to adverse conditions and survival was also good. It behaves like a pet animal. It takes care from predators due to its fighting nature. The capacity of egg production was also high when compared to local and Cauvery. But the market preference to Cauvery was good.

9) Constraints identified and feedback for research

Shedding of feathers was a problem in Aseel when exposed to inconvenient weather condition.

10) Process of farmers participation and their reaction

Farmers are very happy and earning considerable returns through backyard poultry. The breed behaves like a pet animal, takes care from predators due to its fighting nature and hence maintenance was also easy, highly productive than local. The horizontal spread is getting increased. Market value is also high when compared to local one, there is a demand for the breeds and hence marketing is no problem.

OFT 8

1) Title of the technology Assessed: Control of Ranikhet disease in desi chicken

2) Problem Definition:

- Ranikhet disease is disastrous in poultry
- Mortality due to Ranikhet disease

3) Details of technologies selected for assessment / refinement

Technologies Assessed	Details of technologies assessed
Technological Option 1 (Farmer's practice)	No vaccination
Technological Option 2	Lasota vaccine eye drops on 7 th and 14 th day RDVK– Subcutaneous on 8 th and 16 th week
Technological Option 3	Oral pellet Ranikhet vaccine on 7 th and 14 th day RDVK – Subcutaneous on 8 th and 16 th week

4) Source of technology : TANUVAS

5) Production system and thematic area : Poultry disease management (Animal Science)

6) Performance of the Technology with performance indicators

Village Name	Technological option 1 (Farmers practice) No vaccination			Technological option 2 Lasota vaccine eye drops on 7 th and 14 th day RDVK– Subcutaneous on 8 th and 16 th week			Technological option 3 Oral pellet Ranikhet vaccine on 7 th and 14 th day RDVK – Subcutaneous on 8 th and 16 th week		
	No. of birds	Mortality of birds (No.)	Mortality pattern (%)	No. of birds	Mortality of birds (No.)	Mortality pattern (%)	No. of birds	Mortality of birds (No.)	Mortality pattern (%)
Andipatti	75	25	33.3	323	34	10.5	375	0	0
Pulvoikarai	85	38	44.7	275	21	7.6	198	0	0
Melathulukkankulam	68	18	26.5	172	27	15.7	245	0	0
Mudukkankulam	72	32	44.4	230	14	6.1	182	0	0
Mean	-	28	37.2	-	24	10.0	-	0	0

7. Feed back, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques

In non vaccinated lot the mortality was upto 35%. In Lasoto eye drop vaccinated lot the mortality was 9.4%.

No mortality noticed in oral pellet vaccinated chicks.

Farmers felt easy to adopt oral pellet vaccination.

The mortality was not noticed in any farm / farmer holding.

Birds consumed the vaccine pellets without any inhibition.

8. Final recommendation for micro level situation

Controlling of ranikhet disease in poultry either through Lasota vaccine eye drops on 7th and 14th day or RDVK– Subcutaneous on 8th and 16th week or oral pellet Ranikhet vaccine on 7th and 14th day is found to reduce the mortality of poultry.

Oral pellet vaccination is easy to adopt and has good effect in poultry.

No mortality was observed in oral pellet vaccinated fowls.

9. Constraints identified and feedback for research

Application of Lasota vaccine eye drops on 7th and 14th day or

RDVK– Subcutaneous on 8th and 16th week are found difficult to practice by the farmers themselves.

Oral pellet is easy to adopt. If this can be fortified with multi vitamine mixture, then both nutrition and vaccination will be taken care at one stroke.

10. Process of farmers participation and their reaction.

Management of ranikhet disease in poultry by Lasota vaccine eye drops on 7th and 14th day or

RDVK– Subcutaneous on 8th and 16th week or oral pellet Ranikhet vaccine on 7th and 14th day is highly helpful to the poultry farmers to reduce the mortality completely.

Farmers felt that oral pellet Ranikhet vaccine on 7th and 14th day is highly practical to adopt themselves in controlling the disease.