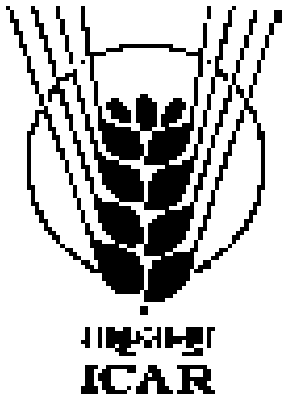

Results-Framework Document (RFD)
for
Central Tobacco Research Institute
(2012-2013)

Rajahmundry – 533 105, Andhra Pradesh
Website: www.ctri.org.in

Section 1: Vision, Mission, Objectives and Functions

Vision

Enhancing productivity and quality of Indian tobacco to make it more remunerative, globally competitive and promoting alternative uses to sustain the crop in the country

Mission

Developing economically viable and eco-friendly agro-technologies for enhancing productivity and quality, reducing harmful substances, developing value-added products for promoting exports and generating revenue and employment on a sustainable basis

Objectives

1. Tobacco cultivar Improvement.
2. Development of agro-technology for sustainable tobacco production and strengthening TOT.
3. Identification of alternative crops and exploiting tobacco for alternative uses.
4. Management of resource constraints for production efficiency and product quality.
5. Development of integrated management strategies for biotic stresses.

Functions

To conduct research on different types of tobacco, with greater emphasis on exportable types, on all phases of production management with a view of attaining economic advantage/benefit to the tobacco growers through improvement in quality and quantity of tobacco; to conduct research on economically viable and sustainable cropping systems alternative to tobacco; to conduct research on diversified uses of tobacco and development of value-added products viz. phyto-chemicals; to produce and distribute quality seeds of notified varieties of tobacco; to publish and disseminate research findings and recommendations of latest technology for the benefit of the tobacco growers, scientific community, policy makers and development agencies.

Section 2: *Inter se* Priorities among Key Objectives, Success Indicators and Targets

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Tobacco cultivar improvement	24.0	Developing tobacco varieties/ hybrids possessing higher leaf yield and resistance to biotic and abiotic stresses to stabilize productivity	Segregating materials, promising recombinants and hybrids developed through conventional breeding	Number	3.0	1100	1080	1060	1040	1020
			Improved lines in replicated evaluation trials	Number	3.0	240	230	220	210	200
			Advanced breeding lines contributed for multilocation testing under the AINRP(T)/ varieties identified or released	Number	2.0	16	15	14	13	12
		Tailoring of tobacco plant type for optimizing the seed yield and phyto-chemicals	Promising germplasm accessions, advanced breeding lines/hybrids evaluated for seed yield potential/ high seed oil/high protein/high solanesol /high nicotine contents	Number	1.5	125	120	120	115	110

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
		Production and distribution of foundation seed of ruling tobacco varieties	Quantity produced/ distributed	kg	5.0	19000	18500	18000	17500	17000
		Germplasm resource management	Germplasm accessions maintained in all forms	Number	2.5	2400	2350	2300	2250	2200
			No. of lines characterized	Number	1.0	150	130	110	100	90
		Biotechnology for tobacco improvement	Genotypes used for molecular characterization/ genome analysis	Number	3.0	85	80	75	70	65
			Molecular mapping populations developed with reference to traits viz., nicotine, solanesol and TSNA	Number	1.5	10	9	8	7	6
			Somaclones of varieties VT 1158 and Kanchan evaluated for yield and virus tolerance under field condition	Number	1.0	50	40	30	20	10
			Seed sterile and non-flowering tobacco clones micropropagated	Number	0.5	140	130	125	120	100

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Development of agro-technology for sustainable tobacco production and strengthening TOT	20.0	Healthy seedling production	Technology interventions for production of healthy transplants	Number	2.0	3	2	1	0	0
		Optimisation of water and nutrient use for productivity enhancement of different tobacco types	Technology interventions for input use efficiency	Number	5.0	6	5	4	3	2
		Evolving site-specific cultural management practices in different agro-ecological sub regions	Production practices for advance breeding lines / varieties	Number	4.0	6	5	4	3	2
		Post harvest product management (PHPM)	Technology interventions developed	Number	1.0	3	2	1	0	0
		Analysis of socio-economics for stratification and to formulate appropriate strategies	Tobacco zone-wise resource utilization and adoption constraints	Number	1.0	6	5	4	3	2
			Zone-wise changing scenario of cropping patterns	Number	1.0	5	4	3	2	1

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
		Technology outreach activities	Zone-wise decision support systems for TOT	Number	1.0	5	4	3	2	1
			Training	Number	1.0	35	30	25	20	15
			FLDs	Number	1.0	10	8	6	4	2
			Focus through group and mass communication methods/ media	Number	1.0	50	40	30	20	10
		Technology assessment	Diagnostic visits and on-farm trials	Number	2.0	18	17	16	15	14
Management of resource constraints for production efficiency and product quality	15.0	Evaluation of soil fertility, water quality and plant nutrition constraints for tobacco and their management	Diagnostic surveys made/Technology developed	Number	3.0	3	2	1	0	0
		Soil quality and nutrient use efficiency in relation to input management	Scientific interventions/ management options evaluated	Number	3.0	3	2	1	0	0
		Characterization of soil biota and use of biofertilisers	Microbial cultures evaluated as bio-fertilizers	Number	2.0	3	2	1	0	0
		Evaluation of tobacco leaf and product quality	Genotypes/ production practices evaluated for tobacco chemical/ bio-chemical quality	Number	2.0	4	3	2	1	0

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
			Samples tested for leaf quality, pesticide residues and smoke constituents	Number	5.0	650	600	550	500	450
Development of Integrated management strategies for biotic stresses	15.0	Screening for host plant resistance to insect pests and diseases	Genotypes/crosses screened	Number	5.0	600	400	250	150	50
		Development of IPM technology	Technologies developed	Number	4.0	4	3	2	1	0
		Evaluation of new molecules and formulations of pesticides for bio-efficacy	Laboratory/ greenhouse and field trials conducted	Number	3.0	4	3	2	1	0
		Monitoring of insect pests and diseases	Insect pests and diseases monitored	Number	3.0	4	3	2	1	0
Identification of alternative crops and exploiting tobacco for alternative uses	14.0	Alternative crops for FCV and non-FCV tobacco practices in different agro-ecological sub regions	Identification of crops/ cropping systems / farming systems for tobacco	Number	8.0	4	3	2	1	0
		Agro-techniques for higher biomass and seed yield	Technologies evaluated/ developed	Number	3.0	3	2	1	0	0
		Identification of potential phytochemicals	Phyto-chemicals evaluated	Number	3.0	4	3	2	1	0

Objective	Weight (%)	Actions	Success Indicator	Unit	Weight (%)	Target/Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Efficient functioning of the RFD system	3.0	Timely submi-ssion of RFD for 2012-13	On time submission	Date	2.0	23.03.12	26.03.12	27.03.12	28.03.12	29.03.12
		Timely submi-ssion of results for 2012-13	On time submission	Date	1.0	01.05.13	02.05.13	03.05.13	06.05.13	07.05.13
Administrative Reforms	5.0	Implement ISO 9001	Prepare ISO 9001 action plan	Date	1.0	04.06.2012	05.06.2012	06.06.2012	07.06.2012	08.06.2012
			Implementation of ISO 9001 action plan	Date	2.0	25.03.2012	26.03.2012	27.03.2012	28.03.2012	29.03.2012
		Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	2.0	100	95	90	85	80
Improving Internal Efficiency/ responsiveness/ service delivery of Ministry/ Department	4.0	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	2.0	100	95	90	85	80
		Implementation of Sevottam	Independent Audit of implementation of public grievance redressal system	%	2.0	100	95	90	85	80

Section 3: Trend values of the success indicators

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
Tobacco Cultivar Improvement	Developing tobacco varieties/ hybrids possessing higher leaf yield and resistance to biotic and abiotic stresses to stabilize productivity	Segregating materials, promising recombinants, hybrids developed through conventional breeding	Number	1050	1060	1080	1090	1100
		Improved lines in replicated evaluation trials	Number	219	225	230	232	235
		Advanced breeding lines contributed for Multi-location testing under the AINRP(T) / varieties identified or released	Number	12	14	15	16	17
	Tailoring of tobacco plant type for optimizing the seed yield and phyto-chemicals	Promising germplasm accessions, advanced breeding lines/hybrids evaluated for seed yield potential/ high seed oil/high protein/ high solanesol / high nicotine contents	Number	100	112	120	125	130
	Production and distribution of	Quantity produced and distributed	kg	18,000	18,200	18,500	19,000	20,000

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
	foundation seed of ruling tobacco varieties							
	Germplasm Resource Management	Germplasm accessions maintained in all forms	Number	2200	2300	2350	2400	2450
		No. of lines characterized	Number	96	110	130	140	145
	Biotechnology for tobacco improvement	Genotypes used for molecular characterization/genome analysis	Number	72	75	80	82	85
		Molecular mapping populations developed with reference to traits viz., nicotine, solanesol and TSNA	Number	10	10	10	11	11
		Somaclones of varieties VT 1158 and Kanchan evaluated for yield and virus tolerance under field condition	Number	100	120	40	30	25
		Seed sterile and non-flowering tobacco clones micropropagated	Number	100	120	130	135	140

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
Development of agro-technology for sustainable tobacco production and strengthening TOT	Healthy seedling production	Technology interventions for production of healthy transplants	Number	3	2	2	2	2
	Optimisation of water and nutrient use for productivity enhancement of different tobacco types	Technology interventions for input use efficiency	Number	6	6	5	5	5
	Evolving site-specific cultural management practices in different agro-ecological sub regions	Production practices for advance breeding lines / varieties	Number	10	7	5	5	5
	Post-harvest product management (PHPM)	Technology interventions developed	Number	2	2	2	2	2
	Analysis of socio-economics for stratification and to	Tobacco zone-wise resource utilization and adoption constraints	Number	4	4	5	5	5
		Zone-wise changing scenario of cropping	Number	4	4	2	2	2

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
	formulate appropriate strategies	patterns						
	Technology outreach activities	Zone-wise decision support systems for TOT	Number	4	4	4	4	4
		Training	Number	28	30	30	30	30
		FLDs	Number	10	8	8	10	10
		Focus through group and mass communication methods/ media	Number	46	50	51	52	53
	Technology assessment	Diagnostic visits and on-farm trials	Number	12	15	17	18	19
Management of resource constraints for production efficiency and product quality	Evaluation of soil fertility, water quality and plant nutrition constraints for tobacco and their management	Diagnostic surveys made/Technology developed	Number	2	2	2	2	2
	Soil quality and nutrient use efficiency in relation to	Scientific interventions/ management options evaluated	Number	2	2	2	3	3

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
	input management							
	Characteriza-tion of soil biota and use of biofertilisers	Microbial cultures evaluated as bio-fertilizers	Number	2	2	2	3	3
	Evaluation of tobacco leaf and product quality	Genotypes/ production practices evaluated for tobacco chemical/ bio-chemical quality	Number	3	3	3	4	4
		Samples tested for leaf quality, pesticide residues and smoke constituents	Number	500	550	600	650	700
Development of Integrated management strategies for biotic stresses	Screening for host plant resistance to insect pests and diseases	Genotypes/crosses screened	Number	1000	1100	425	450	500
	Development of IPM technology	Technologies developed	Number	6	3	3	4	4
	Evaluation of new molecules and formulations of	Laboratory/ greenhouse and field trials conducted	Number	5	3	3	4	4

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
	pesticides for bio-efficacy							
	Monitoring of insect pests and diseases	Insect pests and diseases monitored	Number	9	3	3	6	6
Identification of alternative crops and exploiting tobacco for alternative uses	Alternative crops for FCV and non- FCV tobacco practices in different agro-ecological sub regions	Identification of crops/ cropping systems / farming systems for tobacco	Number	7	5	3	3	3
	Agro-techniques for higher biomass and seed yield	Technologies evaluated/ developed	Number	4	2	2	1	1
	Identification of potential phytochemicals	Phyto-chemicals evaluated	Number	3	3	3	3	3
Efficient function of RFD system	Timely submission of RFD for 2012-13	On time submission	Date	--	14.06.11	26.03.12	--	--

Objective	Actions	Success Indicators	Unit	Actual value for 2010-11	Actual value for 2011-12	Target value for 2012-13	Projected value for 2013-14	Projected value for 2014-15
	Timely submi-ssion of results for 2012-13	On time submission	Date	--	01.05.12	02.05.13	--	--
Administrative Reforms	Implement ISO 9001	Prepare ISO 9001 action plan	Date	--	--	02.05.12	--	--
		Implementation of ISO 9001 action plan	Date	--	--	26.03.13	--	--
	Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	--	--	95	--	--
Improving Internal Efficiency/ responsiveness/ service delivery of Ministry/ Department	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	--	--	95	--	--
	Implementation of Sevottam	Independent Audit of implementation of public grievance redressal system	%	--	--	95	--	--

Section 4:
Description and Definition of Success Indicators and Proposed Measurement Methodology

Objective 1: It is proposed to utilize both conventional and biotechnological means to develop tobacco cultivars/hybrids with higher productivity, quality and resistance to biotic and abiotic stresses. Germplasm management is aimed at acquisition, maintenance, evaluation and utilization of promising accessions in the development of improved cultivars for conventional and novel uses, besides documentation.

The success indicators are the number of segregating materials, promising recombinants and hybrids developed through conventional breeding; number of improved lines tested in replicated evaluation trials; number of advanced breeding lines contributed for multilocation testing under the AINRP(T)/ varieties identified or release; number of promising germplasm accessions, advanced breeding lines/hybrids evaluated for seed yield potential/ high seed oil/high protein/high solanesol /high nicotine contents; quantity of released tobacco varieties seed produced/ distributed to farmers; number of germplasm accessions maintained in all forms and lines characterized; number of genotypes used for molecular characterization/ genome analysis; number of molecular mapping populations developed; number of somaclones of varieties VT 1158 and Kanchan evaluated for yield and virus tolerance under field condition, and number of seed sterile and non-flowering tobacco clones micropropagated

The target/criteria values for various success indicators under various proposed actions given at Section 2 and actual/target/projected values over five years period given at Section 3 are in general showing progressive trend. The success indicator 'Molecular mapping populations developed with reference to traits' for action 'Biotechnology for tobacco improvement' actual/target/projected values are 10 only as the developed population is 10 in number and will be maintained up to 2013. During 2013-15, it is expected to add one more population. For the success indicator 'Somaclones of varieties VT 1158 and Kanchan evaluated for yield and virus tolerance under field condition', as the target is achieved, only promising 40 lines will be assessed during 2012-13 and among them promising lines will be selected during the later years.

Objective 2: Research is focused to produce healthy seedlings, optimization of water and nutrient use for productivity enhancement of different tobacco types, evolving site- specific cultural management practices in different agro-ecological sub regions and post harvest crop management practices. Success indicators cover the number of technologies developed in each activity.

It is envisaged to strengthen extension through critical analysis of socio-economics, formulation of appropriate strategies, effective implementation of different technology outreach activities and evaluation & confirmation of technology performance by technology assessment. Success indicators cover tobacco zone-wise resource utilization and adoption constraints, trends and economics of tobacco cultivation, decision support systems for TOT, women empowerment, training, front-line demonstrations, print media coverage, radio talks, group and mass communication methods, diagnostic visits and on-farm trials.

The target/criteria values given at Section 2 and actual/target/projected values given at Section 3 are in general showing progressive trend. In some cases there is a declining trend due to reduction in available scientific personnel on account of superannuation/transfer. In some cases actual/target/projected values are same in different years as proposed interventions will be tested in 2-3 consecutive years. In FCV tobacco cultivation there are six different zones viz. NBS, CBS, NLS, SLS, SBS and KLS in Andhra Pradesh and Karnataka. As the 5th successive indicator at Objective No 2 is proposed to undertake in all the six zones and 100% weightage is given if the action is completed in all the six zones and there on. 6th and 7th success indicators are contemplated in five zones and 100% weightage is given if the action is completed in all the five zones and there on.

Objective 3: It is envisaged to meet the objective by systematically diagnosing/characterizing the resource (soil and water) constraints in terms of soil nutrient deficiency/ depletions, nutrient imbalances and excess, heavy metal accumulation, plant nutrient status and water deficits/excesses, and evaluating and identifying situation specific management options to promote resource conservation and efficient use. The success indicators cover number of diagnostic surveys made, scientific interventions/management options evaluated for their effects on soil quality and nutrient use efficiency, microbial cultures evaluated as nutrient supplements, monitoring the leaf quality/pesticide residues/smoke constituents in tobacco grown in different production zones.

The criteria/target values for different success indicators under various activities at Section 2 and target/projected values at Section 3 are fixed based on the relative importance/priority of the research activities to be undertaken in respective years and the scientific personnel available. However, same criteria/target values at Section 2 and actual/target/projected values at Section 3 for few success indicators are a mere coincidence.

Objective 4: With respect to integrated pest management, research efforts are focused on strengthening of components of IPM like host-plant resistance, need based chemical control, identification & effective utilization of bio-control

agents, identification & evaluation of novel methods of pest population regulation and demonstration of site-specific IPM packages. The performance indicators are genotypes/crosses screened for pest resistance, laboratory and field trials conducted for evaluation of new molecules/ formulations, insect pests and diseases monitored and IPM technologies developed.

The criteria/target values for different success indicators under various activities at Section 2 are fixed based on the available scientific personnel and research priorities and same for few success indicators are a mere coincidence. The actual/target/projected values given at Section 3 in some cases are showing declining trend due to reduction in available scientific personnel on account of superannuation/transfer. In some cases actual/target/projected values are same in different years as proposed interventions are/will be tested in 2-3 consecutive years. The pathologist who was screening tobacco lines for resistance to Orobanche, black shank, TMV and CMV retired from Council's service and at present only one plant pathologist is available in the Institute. Hence, the target values for 2012-13 for the success indicator 'Genotype/crosses screened' under action 'Screening for host plant resistance to insect pests and diseases' are fixed at 425 and there on for other years.

Objective 5: Efforts are directed to identify alternative crops/farming systems for FCV and non-FCV tobacco and to develop package of practices in different agro-ecological sub regions and developing agro-techniques for higher biomass and seed yield. It is envisaged to identify the potential phyto-chemicals/seed oil. The success indicators are the number of crops/ cropping systems / farming systems identified; number of technologies evaluated/ developed and number of phyto-chemicals evaluated.

The criteria/target values for different success indicators under various activities at Section 2 and target/projected values at Section 3 are fixed based on the current research projects and same values for few success indicators are a mere coincidence. The actual/target/projected values given at Section 3 in some cases are showing declining trend due to reduction in available scientific personnel on account of superannuation/transfer. In some cases actual/target/projected values are same in different years as proposed interventions are tested in 2-3 consecutive years or new set of same number are proposed.

Section 5:
Specific Performance Requirements from other Departments

- Information on tobacco quality requirements of leaf from tobacco traders is essential to breed varieties that suit the domestic and international demand.
- Timely information on approved area for FCV tobacco production in AP and Karnataka are essential for forecasting the production of the required foundation seed.
- Evaluation of new molecules/formulations of pesticides for bio efficacy will depend upon the development and availability of new molecules/formulations from the industry and their suitability to tobacco as per international trade requirements.

Section 6
Outcome/ Impact of activities of organization

1	2	3	4	5	6	7	8	9	10
S.No.	**Outcome/Impact of organization/ RCs**	**Jointly responsible for influencing this outcome/impact with the following organization (s)/ departments/ ministry(ies)**	**Success Indicator (s)**	**Unit**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**
1	Varietal development and breeder seed production	Tobacco Board, Ministry of Commerce & Industry	Tobacco cultivars/hybrids with higher productivity, quality and resistance to biotic and abiotic stresses developed	No.	219	225	230	232	235
			Quantity of seed produced and distributed	kg	18,000	18,200	18,500	1+,000	20,000
2	Developing improved tobacco production technologies	_	Technology interventions developed for input-use-efficiency	No.	6	6	5	5	5
3	Remunerative cropping systems for different agro-climatic zones	SAUs of AP, Gujarat, Odisha, UP etc	Crops/cropping systems/farming systems alternative to tobacco identified	No.	7	5	3	3	3

4	Integrated management of biotic stresses	_	Technologies developed	No.	6	3	3	4	4
5	Resource constraints for production efficiency & product quality	_	Diagnostic surveys made/Technology developed	No.	2	2	2	2	2
			Scientific interventions/ management options evaluated	No.	2	2	2	3	3
6	Alternative uses of tobacco and commercialization of technologies	Ministry of Health and Family welfare	Phytochemicals identified	No.	3	3	3	3	3
7	Technology assessment, refinement and transfer of proven technologies to the farming community	Tobacco Board, Ministry of Commerce& Industry	Decision support systems for TOT	No.	4	4	4	4	4
			Training	No.	28	29	30	30	30
			FLDs	No.	10	8	8	10	10
			Diagnostic visits & on-farm trials	No.	12	15	17	18	19

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Explanation/Action taken on General Comments

Most of the suggestions are incorporated in the revised RFD of the Institute as per the General Comments.

Where ever the suggestions are not followed they were explained at Section-4.

The projected values are fixed for each of the success indicator during any specific year based on the number of experiments contemplated in that year. The target values are fixed keeping in view the scientific cadre strength and the stage the present projects and the anticipated initiation of the new projects. In view of the above facts, the values under actual/ target/ projected values have not followed a definite trend. In certain years, the target values are zero because by that year the proposed project/ objective of project is to be completed.

As In Section-3, the target values for 2012-13 should be the values from 90% column of target/Criteria Values of Section 2, wherever target/ values (2012-13) are changed in section 3 correspondingly changes were made in section 2.

It is pertinent to mention here that monthly achievements of the success indicators of the RFD 2012-13 are being sent in a different format as suggested by the Crop Science Division of ICAR vide e-mail dated 16-5-2012 from Principal Scientist (Commercial Crops) ICAR, New Delhi. In this format scientific objectives are restricted to three instead of five and the success indicators are modified accordingly.

Action taken on specific comments on CTRI RFD (2012-13)

S. No.	Comment	Correction Made
1	Cover page missing	Cover page is enclosed
2	a) In Section 2 Objective No 2 , for three successive indicators the target/criteria for criteria values are same	In FCV tobacco cultivation there are six different zones viz. NBS, CBS, NLS, SLS, SBS and KLS in Andhra Pradesh and Karnataka. As the 5th successive indicator at Objective No 2 is proposed to be undertaken in all the six zones and 100% weightage is given if the action is completed in all the six zones and so on. 6th and 7th success indicators are contemplated in five zones and 100% weightage is given if the action is completed in all the five zones and so on.
	b) In Objective No 3 for three successive indicators the values under 100 and 90% columns are same.	All the three success indicators are related to three different actions and the same criteria values in different columns is mere coincidence.
	c) In objective No 4 the success indicators No 2&3, the target/criteria values are same.	Though the same criteria/target values are given for both the success indicators, actions proposed are different. In Success Indicator No.2, considering the possibility, 100% criteria value given for the development of four IPM technologies and thereon. In Success Indicator No.3, evaluation of four molecules under field condition was given the criteria value of 100% and thereon.
	d) In objective No.5, for one success indicator, the values are same under 70 & 60% columns.	All the Criteria/ target value was changed due to retirement of the existing personnel.
3.	In section 3, the objectives and success indicators are not matching with Section2. For few success indicators, the projected values for one or two years are not given.	Necessary corrections were made.