



Results-Framework Document (R F D)

for

**National Bureau of Agricultural Insect Resources
(2014-2015)**

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Section 1: Vision, Mission, Objectives and Functions

Vision

Harnessing the biodiversity of beneficial insects, insect derived organisms and other bioagents for sustainable agriculture.

Mission

To act as a nodal agency for collection, characterization, documentation, conservation, exchange and utilization of agriculturally important insect resources * (including mites and spiders) and bioagents for sustainable agriculture

Objectives:

1. Augmentation of genetic resources of agriculturally important insects.
2. Conservation, evaluation, utilization and supply of agriculturally important insects.
3. Capacity building and dissemination of technology.

Functions:

- Conducting research and developmental activities for fulfilling the identified objectives
- Conservation and utilization of agriculturally important insects for the benefit of Indian agriculture
- Introduction of co-evolved species for the control of alien pests; Co-ordination of multilocation evaluation of biocontrol agents.
- Capacity building and dissemination of technology.

* “Insects”, “Insect species” and “insect resources” include insect strains and insect derived organisms and their isolates.

Section 2: Inter se priorities among key Objectives, Success indicators and Targets

SI.No.	Mandatory Objectives	Weight (%)	Actions	Success Indicators	Unit	Weight	Target/ Criteria/ Value				
							Excellent	Very Good	Good	Fair	Poor
							100%	90%	80%	70%	60%
1	Augmentation of genetic resources of agriculturally important insects*.	40	Collection and characterization of agriculturally important insects	Insect collections made	Number	15	972	810	648	486	324
				Insect specimens identified	Number	15	11880	9900	7920	5940	3960
				GeneBank accessions, gene sequences & Barcodes developed	Number	10	648	540	432	324	216
2	Conservation, evaluation, utilization and supply of agriculturally important insects.	30	Ex situ conservation	Insect species conserved	Number	15	508	423	338	253	168
			Evaluation of bioagents	Evaluation experiments conducted*	Number	5	32 #	27	22	17	12
			Supply	Insect species supplied	Number	10	551	459	389	275	783
3	Capacity building and dissemination of technology	10	Impartation of training on insects & dissemination of technology	Human resource development	Number	10	26	22	18	14	78
*	Publication/Documentation	5	Publication of research articles in the journals having NAAS rating of 6.0 and above	Research articles published	Number	3	30	27	24	21	18
			Timely publication of institute Annual Report (2013-14)	Annual Report Published	Date	2	30.06.2014	02.07.14	04.07.2014	04.07.14	09.7.14
*	Fiscal resource management	2	Utilisation of released plan fund	Plan fund utilized	%	2	98	96	94	92	90
*	Efficient functioning of RFD	3	Timely Submission of draft RFD 2014-15 for approval	On- time submission	Date	2	May 15 2014	May 16 2014	May 19 2014	May 20 2014	May 21 2014
			Timely submission of RFD results (2014-15)	On -time submission	Date	1	May 1 2014	May 2 2014	May 5 2014	May 6 2014	May 7 2014
*	Enhanced Transparency/ Improved service	3	Rating from independent Audit of implementation of Citizens Charter (CCC)	Degree of implementation of commitments in CCC	%	2	100	95	90	85	80

	delivery of Ministry /Department		Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	1	100	95	90	85	80
*	Administrative Reforms	7	Update departmental strategy to align with revised priorities	Date	%	2	Nov 1 2014	Nov 2 2014	Nov 3 2014	Nov 4 2014	Nov 5 2014
			Implementation of agreed milestones of approved Mitigating strategies for reduction of potential risk of corruption (MSC)	% implementation	%	1	100	90	80	70	60
			Implementation of agreed milestones for implementation of ISO9001	% implementation	%	2	100	95	90	85	80
			Implementation of agreed milestones of approved innovation action plan (IAPs)	% implementation	%	2	100	90	80	70	60

* including bioecological experiments

#As per the revised mandate of the Bureau, the evaluation experiments conducted under AICRP-BC & IPM will not be included . Evaluation experiments under lateral funded projects/NAIP will not be included as these projects will terminate from March 2014, hence target revised.

* **“ Insects” , “ Insect species” and “insect resources” include insect strains and insect derived organisms and their isolates**

^β One scientist was transferred and two on study leave

\$ Figures are for a period of nine months (April-December 2012)

** Based on the new mandate of NBAIL, microbial cultures like plant disease antagonists have been removed.

The evaluation experiments on several isolates of antagonistic fungi and bacteria have been discontinued based on the new mandate.

@ Dependant on demand; supply of plant disease antagonists discontinued.

^ Till 2012-13, the number of persons trained was projected. From 2013-14, the number of training programmes conducted would be projected.

Section 3: Trend Values of the Success Indicators

S.No	Objectives	Actions	Success Indicators	Unit	Actual value for 2012-13	Actual value for 2013/14	Target value for 2014/15	Projected value for 2015-16	Projected value for 2016-17
1	Augmentation of genetic resources of agriculturally important insects*.	Collection and characterization of agriculturally important insects	Insect collections made	Number	1252	765 ^β	810	990	1080
			Insect specimens identified	Number	12473	9900	9900	11500	12000
			GeneBank accessions, gene sequences & Barcodes developed	Number	513	500	540	650	700
2	Conservation, evaluation, utilization and supply of agriculturally important insects.	Ex situ conservation	Insect species conserved	Number	1500	450**	423	490	510
		Evaluation of bioagents	Evaluation experiments conducted	Number	955	135 ##	27##	33	36
		Supply	Insect species supplied	Number	750	495 @	459	550	580
3	Capacity building and dissemination of technology	Impartation of training on insects & dissemination of technology	Human resource development	Number [^]	302	13	22	27	29
*	Publication/Documentation	Publication of research articles in the journals having NAAS rating of 6.0 and above	Research articles published	Number	3	23	27	32	36
		Timely publication of institute Annual Report (2013-14)	Annual Report Published	Date	---	----	02.07.2014	-----	-----
*	Fiscal resource management	Utilisation of released plan fund	Plan fund utilized	%	---	98	96	94	92
*	Efficient functioning of RFD	Timely Submission of draft RFD (2014-15) for approval	On- time submission	Date	----	----	May 16 2014	-----	-----
		Timely submission of RFD results (2014-15)	On -time submission	Date	1	-----	May 2 2014	-----	-----
*	Enhanced Transparency/ Improved service delivery of Ministry /Department	Rating from independent Audit of implementation of Citizens Charter (CCC)	Degree of implementation of commitments in CCC	%	2	----	95	-----	-----

		Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	---	---	95	----	---
*	Administrative Reforms	Update departmental strategy to align with revised priorities	Date	%	2	----	Nov 2 2014	----	Nov 4 2014
		Implementation of agreed milestones of approved Mitigating strategies for reduction of potential risk of corruption (MSC)	% implementation	%	1	---	90	---	---
		Implementation of agreed milestones for implementation of ISO9001	% implementation	%	2	----	95	----	----
		Implementation of agreed milestones of approved innovation action plan (IAPs)	% implementation	%	2	----	90	----	----

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Section 4 (a): Acronyms

S.No.	Acronym	Description
1	HRD	Human Resource Development
2	IPM	Integrated Pest Management
3	NAIP	National Agricultural Innovation Project
4	NBAII	National Bureau of Agriculturally important Insects
5	SAU	State Agricultural Universities
6	TOT	Transfer of Technology

Section 4 (b) : Description and definition of success indicators and proposed measurement methodology

SI.No.	Success Indicator	Description	Definition	Measurement	General comments
1	Insect collections made	Collection of agriculturally important insects from light traps, pheromone traps, field trips etc.	Insect collections for curation, museum buildup & conservation	Number of insects collected	To harness the biodiversity
2	Insect specimens identified	Taxonomy of insect specimens	Identification for nomenclature, classification and resource use.	Number of insect specimens identified	Identification for cataloguing and exploitation
3	GeneBank accessions, gene sequences & Barcodes developed	Information on specificity	Genetic resource base and unique identity	Bio-informatics on insect genetic resources	Molecular characterization, Specific code for information
4	Insect species conserved	Conservation of diverse species and potential strains	Biodiversity protection	Number of insect species conserved	Ex situ conservation for utilization and supply to stakeholders
5	Evaluation experiments conducted	Performance evaluation of biocontrol agents & bioecological experiments	Potentiality & behavioural attributes	Number of experiments conducted [#]	Identification of potential bioagents for inclusion in IPM
6	Insect species supplied	Number of consignments of insect strains, and insect derived organisms and their isolates supplied	Availability with end users	Number of insect resources supplied	Resource supply
7	Human resource development	Capacity building	Transfer of technology (TOT)	Number trained for technology dissemination	Capacity building and dissemination of technologies to beneficiaries

Note: Insects” , “ Insect species” and “insect resources” include insect strains and insect derived organisms and their isolates.

Section 5: Specific performance requirements from other departments that are critical for delivering agreed results

SI.No	Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is requirement from this organization	Justification for this requirement	Please quantify your requirement from this organization	What happens if your requirement is not met
1	State Government	All States	State Agricultural universities	AAU, AAU-J, ANFRAUI, CAU, GBPUAT, KAU, MPKV, MPUAT, OUAT, PAU, SKUAST, TNAU, YSPUHF	Evaluation experiments conducted	Collection of agriculturally important insects and evaluation	Large scale field evaluation across geographical regions	60%	Performance under varied agro ecological conditions would be known

Section 6: Outcome / Impact of activities of Department / Ministry

Sl.No.	Outcome/ Impact	Jointly responsible for influencing this outcome/ impact with the following organization(s) / department (s) / ministry (ies)	Success indicator	Unit	2012 -2013	2013 -2014	2014 -2015	2015-2016	2016-2017
1	Enhanced National biodiversity documentation		Insect specimens identified	Number	12473@	10570	11000	11500	12000
2	Capacity building on biology, biodiversity and biocontrol to stakeholders.	-----	Training programmes organized	Number	302 **	15	25	27	29

* “ Insects” , “ Insect species” and “insect resources” include insect strains and insect derived organisms and their isolates.

** the figure includes numbers of persons trained during 2011-12 & 2012-13. Number of Training programmes organized are projected for 2013-14, 2014-15, 2015-16 and 2016-17 (Based on advice of RFDCU, ICAR, changes were made from 2013-14))

@ includes plant antagonists which was removed later

Outcome /Impact: Trained personnel with expertise for conserving diversity of insects, multiplication of biocontrol agents and technology dissemination.

Setting the Agreed Performance Targets of the Success Indicators

S.No.	Success indicator (s)	Past Achievements of the Success Indicators							Mean of the Achievements	Projected value of the success indicator for 2014-15 as per the approved RFD 2013-14
		n th year	-VI 2008- 09	V 2009- 2010	IV 2010- 2011	III 2011- 2012	II 2012- 2013	I 2013-14		
1	Insect collections made		--	--	--	1050	1252	1519	1273.7 (1151.5)	771
2	Insect specimens identified		---	---	--	8903	12473	12039	11138,33 (12256)	9999
3	GeneBank accessions, gene sequences & Barcodes developed		--	-----	---	380	513	672	521.7 (592.5)	530
4	Insect species conserved		--	-----	---	1725	1342	3156	2074.3 (1533.5)	455
5	Evaluation experiments conducted*		--	-----	---	270	549	565	461.3 (557)	140
6	Insect species supplied		--	-----	---	742	1055	1879	1225.3 (898.5)	500
7	Human resource development		--	-----	---	107	136	146	129.7 (141)	---

Classification of success indicators according to its category

S.No.	Success Indicators	Input	Activity	Internal Output	External Output	Outcome	Measures Qualitative Aspects
1	Insect collections made	False	True	False	False	False	False
2	Insect specimens identified	False	True	False	False	False	True
3	GeneBank accessions, gene sequences & Barcodes developed	False	True	False	False	False	True
4	Insect species conserved	True	False	False	False	False	True
5	Evaluation experiments conducted	False	True	False	False	False	True
6	Insect species supplied	True	False	False	False	False	True
7	Human resource development	False	True	False	False	False	True