



Results-Framework Document (RFD)

for

National Research Centre on Yak (2014-2015)

**Address: Dirang - 790 101, West Kameng District
Arunachal Pradesh**

Website: www.nrcy.org.in

Section 1: Vision, Mission, Objectives and Functions

Vision

Conservation and improvement of yak for higher productivity and profitability through innovative research.

Mission:

Conservation and propagation of novel yak genetic resource and improvement of yak husbandry in India through scientific interventions.

Objectives:

- Improvement of yak productivity through nutritional and health care management
- Conservation and improvement of yak genetic resources

Functions:

To conduct research on conservation and multiplication of yak germ plasm and improvement of yak and its products through nutritional, therapeutic & prophylactic and biotechnological interventions.

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

S. No.	Objective(s)	Weight	Action(s)	Success Indicator(s)	Unit	Weight	Target/Criteria value				
							Excellent	Very Good	Good	Fair	Poor
							100%	90%	80%	70%	60%
1	Improvement of yak productivity through nutritional and health care management	60	Nutritional intervention during winter feed/ fodder scarcity	Production of CFB	No.	30	14400	12000	9600	7200	4800
			Capacity building of stakeholders engaged in yak rearing through training, awareness, animal health cum vaccination camp	Number of training and health camps organized on yak productivity and healthcare management	No	20	17	14	11	8	5
			Measurement of protective antibody titre against FMD	No.	10	120	100	80	60	40	
2	Conservation and improvement of yak genetic resources	20	Production of yak frozen semen straw and embryos	Straws produced for AI/semen bank	No.	5	2500	2000	1500	1000	500
			Propagation of superior male germplasm	Cryopreservation of yak embryos	No.	2	36	30	24	18	12
			AI in organized herd	No.	8	38	32	26	20	14	
			Supply of breeding bulls to farmers	No.	5	8	6	4	2	0	
	Publication/Documentation	5	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	3	22	18	14	10	6
			Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	2	30.06.2014	02.07.2014	04.07.2014	07.07.2014	09.07.2014
	Fiscal resource management	2	Utilization of released plan fund	Plan fund utilized	%	2	98	96	94	92	90
	Efficient Functioning of the RFD System	3	Timely submission of Draft RFD for 2014-2015 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 Results for 2013-2014	On-time submission	Date	1	May 1 2014	May 2 2014	May 5 2014	May 6 2014	May 7 2014

	Enhanced Transparency / Improved Service delivery of Ministry/Department	3	Rating from Independent Audit of implementation of Citizens' / Clients' Charter (CCC)	Degree of implementation of commitments in CCC	%	2	100	95	90	85	80
			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 organizational strategy to align with revised priorities	Date	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)	% of Implementation	%	1	100	90	80	70	60
			Implementation of agreed milestones for ISO 9001	% of implementation	%	2	100	95	90	85	80
			Implementation of milestones of approved Innovation Action Plans (IAPs)	% of implementation	%	2	100	90	80	70	60

Section 3: Trend Values of the Success Indicators

S. No.	Objective	Action	Success Indicator	Unit	Actual Value for FY12/13	Actual Value for FY 13/14	Target Value for FY 14/15	Projected Value for FY 15/16	Projected Value for FY 16/17
1	Improvement of yak productivity through nutritional and health care management	Nutritional intervention during winter feed/fodder scarcity	Production of CFB	No.	11053	14306	12000	13000	13500
		Capacity building of stakeholders engaged in yak rearing through training, awareness, animal health cum vaccination camp	Number of training and health camps organized on yak productivity and healthcare management	No.	14	12	14	16	17
			Measurement of protective antibody titre against FMD	No.	New SI	New SI	100	110	115
2	Conservation and improvement of yak genetic resources	Production of yak frozen semen straw and embryos	Straws produced for AI/semen bank	No.	2096	2090	2000	2500	2500
			Cryopreservation of yak embryos	No.	30	12	30	35	35
		Propagation of superior male germ plasm	AI in organized herd	No.	53	38	32	35	35
			Supply of breeding bulls to farmers	No.	6	8	6	8	8
	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	14	24	18	20	20
		Timely publication of the Institute Annual Report (2013-2014)	Annual Report published	Date	-	-	02/07/14	-	-

	Fiscal resource management	Utilization of released plan fund	Plan fund utilized	%	100	100	96	100	100
	Efficient Functioning of the RFD System	Timely submission of Draft RFD for 2014-2015 for Approval	On-time submission	Date	-	-	16/05/14	-	-
		Timely submission of Results for 2013-2014	On-time submission	Date	-	-	02/05/14	-	-
	Enhanced Transparency / Improved Service delivery of Ministry/Department	Rating from Independent Audit of implementation of Citizens' / Clients' Charter (CCC)	Degree of implementation of commitments in CCC	%	-	-	95	-	-
		Independent Audit of implementation of Grievance Redress Management (GRM) system	Degree of success in implementing GRM	%	-	-	95	-	-
	Administrative Reforms	Update organizational strategy to align with revised priorities	Date	Date	-	-	02/11/14	-	-
		Implementation of agreed milestones of approved Mitigating Strategies for Reduction of potential risk of corruption (MSC)	% of Implementation	%	-	-	90	-	-
		Implementation of agreed milestones for ISO 9001	% of implementation	%	-	-	95	-	-
		Implementation of milestones of approved Innovation Action Plans (IAPs)	% of implementation	%	-	-	90	-	-

Section 4 (a): Acronyms

Sl. No.	Acronym	Description
1.	AH	Animal Husbandry
2.	AI	Artificial Insemination
3.	CFB	Complete Feed Block
4.	FMD	Foot and Mouth Disease
5.	IVF	<i>In vitro</i> fertilization
6.	KVK	Krishi Vigyan Kendra
7.	NGO	Non-Governmental Organization
8.	NRCY	National Research Centre on Yak
9.	SAU	State Agricultural University
10.	SI	Success Indicator

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

Sl. No.	Success indicator	Description	Definition	Measurement	General comments
1	Production of CFB	Complete feed block (CFB) production using available feed and fodder resources	Production of CFB using feed block technology	Number	Ameliorating food scarcity during winter
2	Number of training and health camps organized on yak productivity and healthcare management	Imparting training, organization of health camp, awareness camp, exposure visit etc. on yak production and healthcare management to yak farmers	Disseminating scientific knowledge to yak farmers on yak production and healthcare	Number	Enrichment of scientific knowledge on yak production and health for socio-economic upliftment of yak farmers
3	Measurement of protective antibody titre against FMD	Vaccination of yak in organized herd against FMD	Production of immunized yaks	Number	Control of trans-boundary disease
4	Straws produced for AI/semen bank	<i>In-situ</i> conservation of yak can be achieved through propagation of superior germplasm with artificial insemination (AI) of elite yak bull semen	Production of yak frozen semen	Number	<i>In-situ</i> conservation strategy
5	Cryopreservation of yak embryos	The <i>ex-situ</i> conservation can be achieved through production of embryos using IVF technique and their cryopreservation	Production of embryos through superovulation & embryo collection and IVF techniques	Number	<i>In-situ</i> conservation strategy
6	AI in organized herd	Artificial insemination (AI) is required for propagation of superior germplasm for better productivity	Breeding of oestrous yaks with artificial insemination	Number	Propagation of superior germplasm
7	Supply of breeding bulls to farmers	Propagation of superior germ plasm and reducing inbreeding	Propagation of superior germplasm through natural breeding	Number	Strategy for improving yak herd

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

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met
STATE	Yak rearing states of India	SAUs/State departments of AH, KVKs and NGOs	SAUs/State departments of AH, KVKs and NGOs	Number of training and health camps organized on yak productivity and healthcare management	Selection of trainees/ stakeholders engaged in yak husbandry/ rural development on high hills.	Dissemination of scientific yak husbandry practices and transfer of technologies.	Deputing officials for training/ demonstration to be organized by NRCY.	Slow improving livelihood of highlanders engaged in yak rearing.
STATE	Yak rearing states of India	SAUs/State departments of AH, KVKs and NGOs	SAUs/State departments of AH, KVKs and NGOs	Measurement of protective antibody titre against FMD	Liaison with the yak rearers in the state.	SAU/State Veterinary & AH officials are involved with large section of society for development works.	Cooperation from the officials to help us while collecting blood from the yaks from the field.	Coverage area will be reduced.

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

S. No.	Outcome / Impact	Jointly responsible for influencing this outcome / impact with the following organisation(s) / department(s)/ ministry(ies)	Success Indicator (s)	Unit	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1	Development of strategies for combating winter feed crisis in yak	State Animal Husbandry & Veterinary Departments, NGOs	Improvement in growth and production	%	5.0	7.5	7.5	7.5	7.5
2	Conservation of yak germplasm	State Animal Husbandry & Veterinary Departments, NGOs	Enhancing conception rate	%	5.0	7.0	8.0	8.0	8.0

Past Achievements 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 2014-2015 as per the approved RFD 2013-2014	
		n th year	-	V 2009- 2010	IV 2010- 2011	III 2011- 2012	II 2012- 2013			I 2013- 2014
1.	Production of CFB			833	1648	6498	11053	14304	6867.2	12000
2.	Number of training and health camps organized on yak productivity and healthcare management			3	15	14	14	12	11.6	New SI
3.	Measurement of protective antibody titre against FMD			NA	NA	NA	NA	NA	New success indicator to be implemented from this year. Biannually vaccination is done but impact analysis will be initiated systematically for the first time	New SI
4.	Straws produced for AI/semen bank			-	-	836	2096	2090	1674	2500
5.	Cryopreservation of yak embryos			-	-	24	30	12	22	-
6.	AI in organized herd			23	23	42	53	38	35.8	35
7.	Supply of breeding bulls to farmers			-	-	2	6	8	5.33	8

Classification of Success Indicators according to its category

S. No.	Success Indicator(s)	Input	Activity	Internal Output	External Output	Outcome	Measures Qualitative Aspects
1	Production of CFB	FALSE	FALSE	FALSE	TRUE	FALSE	TRUE
2	Number of training and health camps organized on yak productivity and healthcare management	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
3	Measurement of protective antibody titre against FMD	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
4	Straws produced for AI/semens bank	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
5	Cryopreservation of yak embryos	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE
6	AI in organized herd	FALSE	FALSE	FALSE	TRUE	FALSE	TRUE
7	Supply of breeding bulls to farmers	FALSE	FALSE	TRUE	FALSE	FALSE	TRUE