7.0 BITRA ISLAND

Introduction

This section gives island specific information on the labour availability, the type of works that could be undertaken under MGNREGS and the budget required for undertaking the works proposed in Bitra Island. We have also conducted an evaluation of the MGNREGS activities and the resource use in the island till date to asses the trend and potentials of this scheme in Bitra.

Location

Bitra is the smallest inhabited island in Lakshadweep and has an area of roughly 11 hectare. The climate of this island is warm throughout the year. It is covered by thick brushwood and shrubs, and is rich in coconut palms. All the inhabitance are Muslims and speak a local version of Malayalam which is the Language of Kerala. Bitra also has the largest lagoon in Lakshadweep and this magnificent lagoon is on the north-eastern tip of a large coral ring reef. Coral growths and multi-colored fish are abundant in this lagoon. A shrine, dedicated to Malik Mulla - an old Arab saint who is said to have been buried in is the main attraction of the island. The shrine is an important pilgrimage centre for the other islanders also.



Bitra is located is 11.36 degrees north and the 72.10 degrees east of Lakshadweep. The closest island is Chetlet, which lies at the distance of 48 kilometers. Though the island was an important place for fishing for fishermen from Kiltan and Chetlat, attempt of families to permanently settle was made only in 1909. Prior to 1909 there was no permanent settlement. The first permanent settler was a woman from Chetlat who with her son set up a permanent homestead in the island in 1945.

Demography & Socio — Economic Profile

This section shall provide a summary description of the characteristics of the island including population, literacy, amenities, local economy etc. These sections would provide the reader an over view of the island. This section also prepares a plat form to justify the works suggested by the Village Dweep Panchayat (VDP) islanders and the work adjustments made according to the potentials and gaps of the island.

Population

According to the population estimates in 2009, the island had a population of 328. Out of these 183 were males and 145 were female. The sex ratio of the island is 792 females per 1000 males (2009). The official population according to the 2001 census was 267 and out of this 257 belongs to schedules tribes. Out of the total 71 households 13 households are Below Poverty Line (BPL) as per the latest estimation. This suggests a poverty ratio of 18.31 percent. Bitra marked a population growth of 18.67 during the ten year period from 1991 to 2001. The average family size of the island comes to 3.8 which is one among the lowest family size in the island. According to 2001 census statistics the island stand third (2670/Sqkm) in terms of population density and this was tenth in 1951 (460/Sqkm).

Work Participation

The work participation like many other islands also is very poor in this island too. More over the participation of female in work is also very marginal like many other islands. According to the 2001 census out of the total population of 267 only 126 are working which suggest a work participation of 47.19% which is higher compared to the Lakshadweep work participation rate of 25.32 percent. The work participation of men and women in the island suggests discrepancy lie that in many other places in Lakshadweep. While the participation of women in work in Birta is 22.22% (24 out of 108 women), the participation of men in work is 64.15 (102 out of 159 males).

Literacy

The literacy rate of Lakshadweep as a whole comes to 86.66. This was 23.27 in 1961 which marked a steep growth over past few years. As per the census figures in 2001 the 84.36% of the

population are literates in Bitra. The female literacy is roughly 81.82 (which is 80.47 for Lakshadweep) and the male literacy is 85.82 (Which is 92.53 in Lakshadweep) as per the 2001 census which also suggest a difference of around 3 percent. The literacy rate of the Bitra Island is low compared to that of the Lakshadweep Island as a whole. Compared to the Lakshadweep average the female literacy is better. But the male literacy is comparatively low in Bitra.

Women Empowerment

Like the women in other islands in Lakshadweep the women do not prefer to engage in hard labour. Women are mostly involved in household welfare activities. Since there is no sustainable source of income for women they depend mainly on the income of their husband for any personal spending. The self help movement like in other islands in Lakshadweep has taken root in Bitra also. There are 2 Self Help Groups (SHG) functioning in the island. The membership ranges from 15 to 20 women per group. They meet regularly every month and discuss various health and development issues of the island.

Infrastructure Facilities & Amenities

The infrastructure and amenities in the island include; seven ponds, 92 open wells and 450 meter long PWD road. The island has one upper primary school. There is one Anganwadi which is functioning in the island. Bitra does not have other facilities like Krishibhavan, veterinary hospital and PHC like in other islands in Lakshadweep. This probably is because of the small size and population of the island. There is however a first aid center functioning in the island that provides primary care services to the islanders. As per the latest estimation in 2007 the island has produced a total of 137.776 kwh of power. There are a total of 130 connections in the island out of which 99 are domestic connections, 29 are commercial connections and 2 are industrial connections.

Local Self Government

Bitra also has a Village Deep Panchayat which suggests that the deep is concerned of participations of its citizens in governance. There are three electoral wards and the elected members. Out of the three elected representatives in the island 2 are males and one is female. Since the island is very small in size and the population of the island is very small compared to the

rest of the islands the Panchayat has the advantage of maintaining stronger and closer relationship with every family in the island. Added to this it is important to say that Bitra might the smallest Panchayats in the country and probably in the world.

Local Economy

Agriculture and fisheries like other islands is the major economic activity of the island. According to the 2006-07 statistics 2.2 lakhs of coconut has been harvested in the island. In 19996-97 this was nearly a lakh. Fishing is the second major economic activity of the island. The fish landing was 415 tones in 1997 and this increased to 470 in 2006 which marked a marginal growth compared to other islands. The fish production in 2001 was in the peak with 1268 tones of fish catch. The income from fisheries also increased simultaneously from Rs.79.94 lakhs in 1997 to Rs.94 lakhs in 2006. The income was Rs.254 lakhs in 2001 which marked the peak catch as well as income. During the peak fishing month people from other islands also migrate to Bitra for the fishing operations. This could be a reason for higher fish landing in spite of the smallness oft the island both in size and population.

7.1. MGNREGS Governance Issues

A total of 50 families have been registered for MGNREGS work and only 17 of them were given job cards which is roughly 34 percent of the total job card applicants. 1098 Mandays of work have been completed and out of this 607 days are employed by women. The main works undertaken in the island through MGNREGS include seashore plantation and coconut seedling. Out of the allocation of Rs.2.37 Lakh released for MGNREGS in Bitra, only Rs.1.56 has been utilized (65.82%)

7.2. Labour Supply Trend

The labour requirement to implement all the works suggested / proposed (wish list) by the islanders in five years time frame exceeds the labour availability in the island. Lakshadweep has a specific labour supply trend and it suggest that people in general and especially the women folk as we already said in the case of many other islands, do not prefer to get involved in hard labour. As we stated earlier, total of 50 households have been registered under MGNREGS and a total of 1098 mandays has been created till the implementation of the MGNREGS in Bitra. Assuming a 10

percent growth in the labour force there shall be a total labour force of around 72 by the end of the fifth year. Even with this projection the island would seriously lack enough labour supply to implement all the works proposed/ suggested by the islanders. To implement all the suggested/ proposed works of the islanders there is a requirement of a total of 488406 mandays over the five year period Ref table No.V.7.1, which means roughly 97682 mandays of work a year. Considering this labour scarcity and many other associated factors of the island a prioritization exercise of work has been done and an adjusted table has been prepared for the island. The table no V.7.1 shows the labour supply projection of the island. The projections are based on the labour availability of Bitra Island in the current year (2009-10) as per the MGNREGS records.

Table No.V.7.1: MGNREGS Labour Supply Projections

Island		Project	ed Labour S	Supply		Remarks
	2010-11	2011-12	2012-13	2013-14	2014-15	
Bitra	50	55	60	66	72	
Lakshadweep	19172	19778	20410	21075	21671	10% Increase in Labour Force is projected

Source: Calculated from the population growth trend and the labour supply trend Basic Statistics, 2007, Directorate of Planning and Statistics, Lakshadweep &. Information collected from DRDA, Kavaratti

7.3. Labour Market Seasonality

The labour market in Bitra is affected by a number of factors with in and out side the island. The labour supply trend suggests fluctuations because of various factors through out the year in the island. Monsoon, the religious festivals and gender practices are some of the important factors that make impact the labour availability at a point of time in the island. This concludes that the labour planning should be done in align with this factors and the changes in the labour force.

May to July is noted as peak months when fishermen return from sea and are available in the island for works. It is also important to say that these months, because of monsoon, are not suitable for transportation of the materials from the mainland. Therefore, those works that require transportation of materials from the main land needs to be planned ahead of monsoon. The materials need to be purchased, transported and stored before the monsoon so that it won't affect the work during monsoon in the island. Since the material transportation need to be done in advance and are done from the main land the cost of materials might be higher compared to that of the other places. This might increase the material cost component of MGNREGS. Therefore, it is

recommended to follow a reverse ratio of wage and material that is 40:60 (40% for wage and 60% for material) instead of the 60:40 ratio (60 for wage and 40 for material), which is mentioned in the guideline. The table no. V.7.2 explains the labour market seasonality of Bitra.

Table No V.7.2.: Labour Market Seasonality

Month		our Supply		Remarks
	Low	Moderate	Peak	
January		*		These months are normal months and are
February		*		characterized by moderate supply of labour force.
March		*		It is not categorized as peak season for
April		*		MGNREGS activities since many of the men folk are actively engaged in fishing.
May			*	During Monsoon the islanders do not engage in
June			*	fishing and the fishermen during this period are
July			*	available for alternative work. Since fishing activity is not so active during this season the women flock that are engaged in fish processing activities are also relatively free during this period. These months are those with maximum supply of labour force in the island.
August	*			These months are Ramzaan months which is a
September	*			fasting month of the Muslim community. People usually do not prefer to get involved in heavy work since they are fasting from early morning till very late evening. Therefore the work which does not require hard work could be done during this season.
October		*		These months the fishermen return back to fishing
November		*	-	activities and so the men flocks are not usually
December		*		available in the island for non fish based activities. But the women folk are available for work.

Source: Discussion with Department Officials and VDP Members & Islanders of Bitra

7.4. Suggested / Proposed works (Wish list) by VDP and the Islanders

Identification of the works for Bitra Island like the other islands has been done through a systematic and participatory exercise conducted by a team from the Centre for Rural Management. Various participatory discussions and interviews have been conducted with a number of stakeholders apart from the islanders to derive the works that could be done in the island under MGNREGS. The experiences of the islanders and the members of VDP have been consolidated since they are in a better position to suggest the gaps and missing infrastructures in Bitra. The analysis of the various factors including the labour trend, labour practices, gender dimension of labour participation etc. compelled us to revisit the works suggested by the islanders. However utmost care has been given to ensure maximum inclusion of the activities suggested by them. In most of the cases only the

number of works has been reduced and hardly any activity is completely removed during work adjustment. Added to these we strongly feel that the works suggested by the Islanders of the respective Village Deep Panchayats should be properly documented in the Perspective Plan, since it might have some development potential in future. It is also ethical to give adequate attention to the 'wish list' of the islanders and other stakeholders. Hence, the tables no.V.7.3.a, V.7.3.b &V.7.3.c are given which explain the suggested / proposed works ('wish list') and other details given by the VDP members and the islanders



Need for renovation of such ponds under MGNREGA

Table No. V.7.3.a: Missing Infrastructure / Works suggested by Bitra Village Dweep Panchayat & Islanders (Type of work, no of works, cost and proposed under which programme (Convergence) Name of the Island :Bitra SI.No. Missing Year Infrastructure/ 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 Total Proposed works No of Cost Proposed under No of Cost (Rs. which Prog which Prog which Prog works/ which Prog which Prog works/ In Lakhs) works/ (Rs. In works/ (Rs. In works/ (Rs. In (Rs. In works/ (Rs. In Lakhs) Lakhs) activty Lakhs) activity (Convergence) Lakhs) activity Lakhs) (Convergence) (Convergence) activity (Convergence) activity (Convergence) activity taken up taken up taken up taken up taken up taken up 2 10 11 12 14 15 16 17 18 5 8 9 13 19 3 4 6 I. Water Conservation Digging of Ponds PRWSS PRWSS PRWSS PRWSS PRWSS 15 7.5 6 9 6 0 0 15 1.2 Percolation Well 12 3.78 PRWSS 14 PRWSS 1.89 **PRWSS** 1.89 PRWSS 1.57 **PRWSS** 43 43 4.41 6 6 5 Well Recharge Pit PRWSS PRWSS PRWSS 1.3 0.12 12 0.18 11 0.165 0 NA 0 NA 31 31 8 0 0 Husk Burial 1800 180 ADF 2300 230 ADF 2100 ADF 700 70 ADF 600 60 ADF 7500 7500 210 Rain Water 4.5 PWD/ST NA NA NA NA 15 15 15 0 0 0 0 0 0 0 0 Harvesting Tank II. Renovation of Traditional Water Bodies DSP DSP DSP DSP Pond Renovation 7.5 20 DSP 14 75 15 10 18 8 75 11.1 18.75 130 19.5 PRWSS 90 9.75 PRWSS 555 125 PRWSC 145 21.75 PRWSS 13.5 **PRWSS** 65 555 Well Renovation III. Rural Connectivity Road Work NA 0 NA NA NA NA 0 0 0 0 0

SI.No.	Missing											Year						
	Infrastructure/		2010-2	2011		2011-2	2012		2012-2	2013		2013-2	2014		2014-2	2015	To	otal
	Proposed works	No of works/ activity taken up	Cost (Rs. In Lakhs)	Proposed under which Prog (Convergence)	No of works/ activity taken up	Cost (Rs. In Lakhs)	Proposed under which Prog (Convergence)	No of works/ activity taken up	Cost (Rs. In Lakhs)	Proposed under which Prog (Convergence)	No of works/ activity taken up	Cost (Rs. In Lakhs)	Proposed under which Prog (Convergence)	No of works/ activity taken up	Cost (Rs. In Lakhs)	Proposed under which Prog (Convergence)	No of works/ activty taken up	Cost (Rs. In Lakhs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
								IV. Flo	od Contr	ol								
IV.1	Anti Sea Erosion Hollow Block Repair	0.5	4	LDMF/PWD	0	0	NA	0	0	NA	0	0	NA	0.5	4	LDMF/PWD	1	1
IV.2	Sea Shore Plantation(ha)	0	0	NA	0.99	2.45	EFD	3.96	2									
IV.3	Sea Mouth Cleaning (m)	0	0	NA	0	0	NA	30	3	LDMF/PWD	30	3	LDMF/PWD	40	4	LDMF/PWD	100	1
								V. Land	Developr	ment								
V.1	Coconut Seedlings	540	2.7	ADF	635	3.175	ADF	560	2.8	ADF	300	1.5	ADF	215	1.075	ADF	2250	2250
V.2	Coconut Pathy	2	0.34	ADF	5	0.85	ADF	3	0.51	ADF	3	0.51	ADF	2	0.34	ADF	15000	15
V.3	Horticulture (ha)	0	0	NA	0.99	0.98	RKVY	0	0	NA	0.99	0.98	RKVY	0	0	NA	1.98	0.04
V.4	Land Development Works & Island Cleaning (ha)	2	0.096	DSP	3	0.144	DSP	2	0.096	DSP	3	0.14	DSP	2	0.096	DSP	12	12
V.5	Coconut Compost pit	360	5.4	ADF	390	5.85	ADF	375	5.625	ADF	190	2.85	ADF	185	2.775	ADF	15	1500
							-	VI. Ot	her Work	S								
VI.1	Coconut Climbing	0	0	NA	0	0	NA	0	1.25	ADF/CB	0	1.25	ADF/CB	0	1.25	ADF/CB	0	3.75

Note: PRWSS - Protected Rural Water Supply Scheme,. ADF - Agriculture Department Fund, PWD &ST - Public Works Department and Science and Technology Dept.

DSP -= Development Scheme of Panchayat , TSC- Total Sanitation Campaign, EFD - Environmental Forestry Department, LDMF- Lakshadweep Disaster Management Fund, CB- Coconut Board, RKVY: Ratriya Krishi Vikas Yojana Source : Information collected from VDP, Bitra & other stakeholders

	Table No. \	V.7.3.b : Mis	sing Infrastru	cture / Work	s suggeste	d by Bitra Vi	llage Dwe	ep Panchayat	& Islanders	(Expected	number of se	elf employ	ment, expecte	ed mandays		
							generat	ion, mandays	converted i	n to number	of persons)					
						Na	ame of the	e Island : Bitra								
SI.No.	Missing Infrastructure/											Yea	r			
	Works proposed			2010-2011					2011-2012					2012-2013		
		No.of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays gener ation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays gener ation	Weightage	Mandays converted in to No. of Persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
				•		1	I. Water C	onservation								
l.1	Digging of Ponds	5	0	3600	3%	2	6	0	4320	3%	2	4	0	2880	2%	1
1.2	Percolation Well	12	0	1814	2%	1	14	0	2117	1%	1	6	0	907	1%	0
1.3	Well Recharge Pit	8	0	96	0%	0	12	0	144	0%	0	11	0	132	0%	0
1.4	Husk Burial	1800	0	86400	75%	37	2300	0	110400	78%	43	2100	0	100800	77%	46
1.5	Rain Water Harvesting Tank	15	0	2160	2%	1	0	0	0	0%	0	0	0	0	0%	0
						II. Re	enovation	of Water Bod	es							
II.1	Pond Renovation	15	0	3600	3%	2	20	0	4800	3%	2	18	0	4320	3%	2
II.2	Well Renovation	125	0	9000	8%	4	145	0	10440	7%	4	130	0	9360	7%	4
							III. Rural (Connectivity								
III.1	Road Work	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%	0

SI.No.	Missing Infrastructure/											Yea	r			
	Works proposed			2010-2011					2011-2012					2012-2013		
		No.of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
							IV. Floo	od Control								
IV.1	Anti Sea Erosion Hollow Block Repair	0.5	0	1920	2%	1	0	0	0	0%	0	0	0	0	0%	0
IV.2	Sea Shore Plantation(ha)	0	0	0	0%	0	0.99	0	1176	1%	0	0.99	0	1176	1%	1
IV.3	Sea Mouth Cleaning (m)	0	0	0	0%	0	0	0	0	0%	0	30	0	2400	2%	1
							V. Land D	Development								
V.1	Coconut Seedlings	540	0	2160	2%	1	635	0	2540	2%	1	560	0	2240	2%	1
V.2	Coconut Pathy	360	0	4320	4%	2	390	0	4680	3%	2	375	0	4500	3%	2
V.3	Horticulture (ha)	0	0	0	0%	0	0.99	0	784	1%	0	0	0	0	0%	0
V.4	Land Development Works & Island Cleaning (ha)	2	0	77	0%	0	3	0	115	0%	0	2	0	77	0%	0
V.5	Coconut Compost pit	2	0	272	0%	0	5	0	680	0%	0	3	0	408	0%	0
							VI. Oth	ner Works								
VI.1	Coconut Climbing	0	0	0	0%	0	0	0	0	0%	0	0	0	1000	1%	0
	Total		0	115419	100%	50		0	142196	100%	55		0	130200	100%	60

Table No. V.7. 1.ii contd.....

	Table No. \	7.7.3.b : M	issing Infrastro	ucture / Woi	rks suggeste	ed by Bitra V	illage Dw	eep Panchayat	& Islanders	(Expected	number of s	elf emplo	yment, expecte	ed mandays	3	
							genera	tion, mandays	converted i	n to number	of persons)					
						N	lame of th	ne Island : Bitra	1							
								Year								
SI.No.	Missing Infrastructure/			2013-2014					2014-2015					Total		
	Works proposed	No. of works/ activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
							I.Water (Conservation								
l.1	Digging of Ponds	0	0	0	0%	0	0	0	0	0%	0	15	0	10800	2%	7
1.2	Percolation Well	6	0	907	2%	1	5	0	756	2%	1	43	0	6501	1%	4
1.3	Well Recharge Pit	0	0	0	0%	0	0	0	0	0%	0	31	0	372	0%	0
1.4	Husk Burial	700	0	33600	63%	41	600	0	28800	61%	44	7500	0	360000	74%	223
1.5	Rain Water Harvesting Tank	0	0	0	0%	0	0	0	0	0%	0	15	0	2160	0%	1
						II.R	enovation	of Water Bod	ies							
II.2	Pond Renovation	14	0	3360	6%	4	8	0	1920	4%	3	75	0	18000	4%	11
II.1	Well Renovation	90	0	6480	12%	8	65	0	4680	10%	7	555	0	39960	8%	25
							III.Rural	Connectivity								
III.1	Road Work	0	0	0	0%	0	0	0	0	0%	0	0	0	0	0%	0

Sl.No.	Missing Infrastructure/			2013-2014					2014-2015					Total		
	Works proposed	No. of works/ activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons	No. of works /activity taken up	Expected No. of self employment	Expected mandays generation	Weightage	Mandays converted in to No. of Persons
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
							IV. Flo	od Control								
IV.1	Anti Sea Erosion Hollow Block Repair	0	0	0	0%	0	0.5	0	1920	4%	3	1	0	3840	1%	2
IV.2	Sea Shore Plantation(ha)	0.99	0	1176	2%	1	0.99	0	1176	3%	2	3.96	0	4704	1%	3
IV.3	Sea Mouth Cleaning (m)	30	0	2400	4%	3	40	0	3200	7%	5	100	0	8000	2%	5
							V. Land	Development								
V.1	Coconut Seedlings	300	0	1200	2%	1	215	0	860	2%	1	2250	0	9000	2%	6
V.2	Coconut Pathy	190	0	2280	4%	3	185	0	2220	5%	3	1500	0	18000	4%	11
V.3	Horticulture (ha)	0.99	0	784	1%	1	0	0	0	0%	0	1.98	0	1568	0%	1
V.4	Land Development Works & Island Cleaning (ha) Coconut Compost pit	3	0	115	0%	0	2	0	77	0%	0	12	0	461	0%	0
V.5	Coconat Compost pit	3	U	408	1%	1	2	-	272	1%	0	15	U	2040	0%	1
							VI. Ot	her Works			1		1	1		
VI.1	Coconut Climbing	0	0	1000	2%	1	0	0	1000	2%	2	0	0	3000	1%	2
	Total	Dir o ii	0	53710	100%	66		0	46881	100%	72		0	488406	100%	303

Source: Information collected from VDP, Bitra & other stakeholders

				Table N	No. V.7.3.c	: Missing In	frastructure	/ Works	suggested by	Bitra Villag	je Dweep I	Panchayat a	& Islanders (E	Expected	l mandays				
								gene	ration, manday	ys converte	ed in to nu	mber of pe	rsons & total	employr	ment)				
									Name of the	Island: Bitra	3								
Sl.No.	Missing			2010)-2011					201	1-2012					2012	-2013		
	Infrastructure Works Proposed Works Pro															Total Employment			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Digging of 7.5 0 2600 29 2 2600 0 0 4220 29 2 4220 6 0 2890 29 1 2890																		
I.1	Digging of Ponds 7.5 0 3600 3% 2 3600 9 0 4320 3% 2 4320 6 0 2880 2% 1 2880 Percolation 3.78 0 1814 2% 1 1814 4.41 0 2117 1% 1 2117 1.80 0 907 1% 0 907																		
1.2		3.78	0	1814	2%	1	1814	4.41	0	2117	1%	1	2117	1.89	0	907	1%	0	907
1.3	Recharge Pit	0.12	0	96	0%	0	96	0.18	0	144	0%	0	144	0.165	0	132	0%	0	132
1.4	Husk Burial	180	0	86400	75%	37	86400	230	0	110400	78%	43	110400	210	0	100800	77%	46	100800
1.5	Rain Water Harvesting Tank	4.5	0	2160	2%	1	2160	0	0	0	0%	0	0	0	0	0	0%	0	0
									II. Renovation of	of Water Boo	dies								
II.1	Pond Renovation	7.5	0	3600	3%	2	2	10	0	4800	3%	2	2	9	0	4320	3%	2	2
II.2	Well Renovation	18.75	0	9000	8%	4	4	21.75	0	10440	7%	4	4	19.5	0	9360	7%	4	4

SI.No.	Missing infrastructure			2010	-2011					2011	-2012					2012	-2013		
	/ Works proposed	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weight age	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weight age	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weight age	Mandays converted in to person	Total Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
						1			III. Rural Co	onnectivity	I.						l l	•	
III.1	Road Work	0	0	0	0%	0	0	0	0	0	0%	0	0	0	0	0	0%	0	0
									IV. Flood	Control									
	Anti Sea Erosion Hollow Block																		
IV.1	Repair	4	0	1920	2%	1	1920	0	0	0	0%	0	0	0	0	0	0%	0	0
IV.2	Sea Shore Plantation(ha)	0	0	0	0%	0	0	2.45	0	1176	1%	0	1176	2.45	0	1176	1%	1	1176
IV.3	Sea Mouth Cleaning (m)	0	0	0	0%	0	0	0	0	0	0%	0	0	3	0	2400	2%	1	2400
									V. Land De	velopment									
V.1	Coconut Seedlings	2.7	0	2160	2%	1	2160	3.175	0	2540	2%	1	2540	2.8	0	2240	2%	1	2240
V.2	Coconut Pathy	0.34	0	272	0%	0	272	0.85	0	680	0%	0	680	0.51	0	408	0%	0	408
V.3	Horticulture (ha)	0	0	0	0%	0	0	0.98	0	784	1%	0	784	0	0	0	0%	0	0

SI.No.	Missing			2010	0-2011					201	1-2012					2012	2-2013		
	infrastructure / Works proposed	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	L						I	'	V. Land Develo	pment (Cont	d)	<u>I</u>	l .		I	l	<u>I</u>		
V.4	Land Development Works & Island Cleaning (ha)	0.096	0	77	0%	0	77	0.144	0	115	0%	0	115	0.096	0	77	0%	0	77
V.5	Coconut Compost pit	5.4	0	4320	4%	2	4320	5.85	0	4680	3%	2	4680	5.625	0	4500	3%	2	4500
									VI. Oth	er Works									
VI.1	Coconut Climbing	0	0	0	0%	0	0	0	0	0	0%	0	0	1.25	0	1000	1%	0	1000
	Total	234.69	0	115419	100%	50	115419	288.8	0	142196	100%	55	142196	262.29	0	130200	100%	60	130200

Table No. V.7.1.iii contd.....

				Tabl	e No. V.7.3.0	:Missing Ir	nfrastructure	/ Works	suggested b	y Bitra Villa	age Dweep	Panchayat	& Islanders	(Expecte	ed mandays				
								gene	eration, mand	lays conver	ted in to n	umber of pe	ersons & tota	l emplo	yment)				
									Name of th	ne Island: Bi	tra								
SI.No.	Missing										Year								
	infrastructure/			20)13-2014					201	4-2015						Total		
	Works proposed	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	•								I. Water (Conservatio	1								
	Digging of	Digging of																	
I.1	Ponds	0	0 0 0 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																
	Percolation																		
1.2	Well	1.89	0	907	2%	1	907	1.58	0	758	2%	1	758	13.55	0	6503	1%	4	6503
1.3	Well Recharge Pit	0	0	0	0%	0	0	0	0	0	0%	0	0	0.465	0	372	0%	0	372
1.4	Husk Burial	70	0	33600	63%	41	33600	60	0	28800	61%	44	28800	750	0	360000	74%	223	360000
	Rain Water Harvesting		-						-						-				
1.5	Tank	0	0	0	0%	0	0	0	0	0	0%	0	0	4.5	0	2160	0%	1	2160
				T	1	T		1	II. Renovation	n of Water B	odies	T T				Г			T
II.1	Pond Renovation	7	0	3360	6%	4	3360	4	0	1920	4%	3	1920	37.5	0	18000	4%	11	18000
	Well																		
II.2	Renovation	13.5	0	6480	12%	8	6480	9.75	0	4680	10%	7	4680	83.25	0	39960	8%	25	39960
									III. Rural	Connectivity	y								
III.1	Road Work	0	0	0	0%	0	0	0	0	0	0%	0	0	0	0	0	0%	0	0

SI.No.	Missing										Year								
	infrastructure/			20	013-2014					20	14-2015					7	Total		
	Works proposed	Cost (Rs. In lakhs)	Expected No. of self employment	Expect ed manda ys genera ted	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment	Cost (Rs. In lakhs)	Expected No. of self employment	Expected mandays generated	Weightage	Mandays converted in to person	Total Employment
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	1	1	r		ı	1			IV. FI	ood Control	1	I	r	ı	1	I	1	1	
IV.1	Anti Sea Erosion Hollow Block Repair	0	0	0	0%	0	0	4	0	1920	4%	3	1920	8	0	3840	1%	2	3840
IV.2	Sea Shore Plantation(ha)	2.45	0	117 6	2%	1	1176	2.45	0	1176	3%	2	1176	9.8	0	4704	1%	3	4704
IV.3	Sea Mouth Cleaning (m)	3	0	240 0	4%	3	2400	4	0	3200	7%	5	3200	10	0	8000	2%	5	8000
									V. Land	Developme	nt								
V.1	Coconut Seedlings	1.5	0	120 0	2%	1	1200	1.075	0	860	2%	1	860	11.25	0	9000	2%	6	9000
V.2	Coconut Pathy	0.51	0	408	1%	1	408	0.34	0	272	1%	0	272	2.55	0	2040	0%	1	2040
V.3	Horticulture (ha)	0.98	0	784	1%	1	784		0		0%	0		1.96	0	1568	0%	1	1568
V.4	Land Development Works & Island Cleaning (ha)	0.144	0	115	0%	0	115	0.096	0	77	0%	0	77	0.576	0	461	0%	0	461
	Coconut			228								-						-	
V.5	Compost pit	2.85	0	0	4%	3	2280	2.775	0	2220	5%	3	2220	22.5	0	18000	4%	11	18000
	-	I		100					VI. O	ther Works	<u> </u>				 		1		
VI.1	Coconut Climbing	1.25	0	100 0	2%	1	1000	1.25	0	1000	2%	2	1000	3.75	0	3000	1%	2	3000
	Total	105.1	0	537 10	100%	66	53710	91.32	0	46883	100%	72	46883	982.2	0	488408	100%	303	488408

Source: Information collected from VDP, Bitra & other stakeholders

7.5. Limitations of the Suggested Proposal

Implementation of the above proposed works, completely in Bitra Island has a number of limitations. The limitation led the planning team to think of various alternatives based on the peculiar requirement and the economic characteristics of the island. A prioritizing exercise has been done by the team based on the sectoral and activity linkages as well as the core competency of the island. The activities and sectors with stronger interlinkages and externalities have been suggested as priority sectors and activities. A summary fact of the past trend of the MGNREGS activities in Bitra also has been assessed while measuring the potential of certain activities in the Island. The following factors are taken in to account seriously while doing the prioritization exercise.

7.5.1.Ecological Pressure and environment fragility

Ecological pressure and fragility of the environment are two very important factors that have been considered by the planning team while making the work adjustments in the island. The small size of the island both in terms of area and population is also an important limiting factor to undertake further work in the island. Those activities that potentially could pressurize the island ecology have been adjusted. Most of the adjustments are done in water Conservation and in preservation of traditional water bodies. Some examples include suggestions to construct 15 additional ponds adjusted to 5, the percolation of 43 well which are adjusted to 12 etc... A total of 7500 husk burial units has been suggested by the islanders and has been adjusted to just 42.

7.5.ii.Limitation of Labour supply

There is also a serious limitation of labour supply in the island. To implement all the works suggested by various stake holders during the field visit require over 4.88 lakhs of mandays which is not available in the island as per the present registration trend and labour force projection.

7.5.iii Gender and Work culture

The gender and the work culture of the island also is very different. Heavy labour works are usually not preferred especially by women and most of the works undertaken by women are light works. It is therefore felt that this issue needs to be considered while preparing the labour planning. The table No has attempted to categorize the works according to its gender focus. It suggests that most of the heavy works like road construction, well construction etc are usually done by men.

There are also cultural and traditional beliefs and practices associated with the labour practices which limit people from engaging in all kinds of work equally by both men and women.

7.5.iv. Migration During Monsoon

During monsoon people of Bitra migrate to Chetlat Island because of security reasons since the island is very small. This also limits undertaking of work in this island during monsoon. It is also difficult to travel in the island during Monsoon.

Table No V.7.4: Proposed activities & Gender

Activities Proposed	Women	Men	Remarks
·		I. Wat	er Conservation
I.1 Digging of Pond		*	This is a heavy work which requires hard labour and usually
I.2 Percolation of Well			women are not engaged in such activities in the islands. Husk
I.3. Well recharge Pit		*	Burial could use women also since a part of this work only
I.4. Husk Burial	*	*	require soft labour.
I.4. Rain Water Harvesting Tank		*	Rainwater Harvesting Tank construction since involve heavy labour most of the works shall be done by men. However some components of the work could also be done by women.
	II. Re	enovation o	f Traditional Water bodies
II.1. Pond Renovation		*	Like the construction of new well the renovation of the old pond
II.2 Well Renovation		*	also is a male dominated work since it require hard labour which is not preferred by women.
		III. Ru	ral Connectivity
		IV.	Flood Control
IV.2. Anti Sea Erosion		*	This work also could be done by women since most of the
Work (Tetra Pol / Hollow			work in this category also do not require hard labour
Block)			However the Anti sea erosion activities proposed in the
			plan require heavy work and this work is usually not
IV.1. Seashore Plantation	*	*	preferred by women.
IV.3. Sea Mouth Cleaning		*	
		V. Lar	nd Development
V.1. Coconut Seedling	*	*	Except horticulture, the other activities suggested under this
V.2 Coconut Pathi	*	*	head are also sharable between women and men. It is very
V.3 Horticulture	*		important to suggest that the activities that have a strong
V.4. Land Development and	*	*	association with the capacity of women should be preferably
Island Cleaning			given to women.
V.5 Coconut Compost Pit		*	
			VI. Other
			Septic tank construction similar to the road constriction is a hard
VI 2. Coconut Climbing			labour. Therefore it is also dominated by men. Coconut climbing
		*	is considered traditionally as a male dominant activity and
			culturally it is not acceptable for women.

Source: Participating discussion and Focus Group Discussions conducted in the Island among VDP members, women SHG members, other Islanders and officials.

7.6. Adjusted Proposal (Finalization of Proposals)

Based on the above limitations of the island we have undertaken a systematic prioritization exercise to appropriately finalize the works in various sectors. This has carefully taken in to account both the potential of the island as well as the demand of the islanders. Further the prioritization has carefully taken in to consideration of major the requirements mentioned by various stake holders in the islands including the VDP leadership, islanders and the island administration. The table No. V.7. 5.a, V.7. 5 b & V.7. 5.c tables suggest the finalizing of work done and the variance. The adjustment (finalization) in the proposal has been done based on various factors. Some of these factors as already said are labour availability, gender practices of work, ecological pressure on the island and the development potentials of the activity.



The perspective plan proposes seashore protection for similar areas under MGNREGS

		Table	No.V.7. 5	5.a : Missing Infi	rastructur	e / Propos	sed Works: FINA	ALISED (T	ype of wo	orks, no of work	s, cost an	d propos	ed under which	programi	me / Conv	vergence)		
								Name	of the Isla	and : Bitra								
SL	Missing									Year								
No	Infrastructure/ Works		2010 –	2011		2011-2	2012		2012-2	2013		2013-	2014		2014-2	2015	То	tal
	proposed	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		•			•			I. Wa	ter Cons	ervation	•			•	•		•	
l.1	Digging of Pond	1	1.5	PRWSS	2	3	PRWSS	1	1.5	PRWSS	1	1.5	PRWSS	0	0	NA	5	7.5
1.2	Percolation of Well	2	0.63	PRWSS	3	0.945	PRWSS	2	0.63	PRWSS	2	0.63	PRWSS	3	0.945	PRWSS	12	3.78
1.3	Well Recharge Pit	5	0.075	PRWSS	5	0.075	PRWSS	0	0	NA	0	0	NA	0	0	NA	10	0.15
1.4	Husk Burial	10	1	ADF	8	0.8	ADF	9	0.9	ADF	8	0.8	ADF	7	0.7	ADF	42	4.2
1.5	Rain Water Harvesting Tank	3	0.9	PWD/ST	4	1.2	PWD/ST	3	0.9	PWD/ST	3	0.9	PWD/ST	4	1.2	PWD/ST	17	5.1
							II. Re	novation	of Tradition	onal Water bodi	es							
II.1	Pond Renovation	4	2	DSP	2	1	DSP	2	1	DSP	1	0.5	DSP	1	0.5	DSP	10	5
11.2	Well Renovation	3	0.45	PRWSS	4	0.6	PRWSS	3	0.45	PRWSS	4	0.6	PRWSS	3	0.45	PRWSS	17	2.55
								III.R	ural conn	ectivity								
III.1	Road Work	0	0	NA	0	0												

SL	Missing									Year								
No	Infrastructure/ Works		2010 –	2011		2011-2	2012		2012-	2013		2013-	2014		2014-	2015	То	tal
	proposed	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	1				I .			IV	. Flood Co	ontrol	I	I			I			
IV.1	(Anti Sea Erosion Work) Hollow Block Repair	0.5	4	LDMF/PWD	0	0	NA	0	0	NA	0	0	NA	0.5	4	LDMF/PWD	1	8
IV.2	Sea Shore Plantation (ha)	0	0	NA	0.99	2.45	EFD	3.96	9.8									
IV.3	Sea Mouth Cleaning (m)	0	0	NA	0	0	NA	30	3		30	3	LDMF/PWD	40	4	LDMF/PWD	100	10
								V. La	and Devel	opment								
V.1	Coconut Seedlings.	30	0.15	ADF	35	0.175	ADF	25	0.125	ADF	20	0.1	ADF	25	0.125	ADF	135	0.675
V.2	Coconut Pathy	2	0.34	ADF	2	0.34	ADF	1	0.17	ADF	1	0.17	ADF	1	0.17	ADF	7	1.19
V.3	Horticulture (ha)	0	0	NA	0.99	0.98	RKVY	0	0	NA	0.99	0.98	RKVY	0	0	NA Tabla Na W 7 1	1.98	1.96

SL	Missing									Year								
No	Infrastructure/ Works		2010 –	2011		2011-2	2012		2012-2	2013		2013-	2014		2014-2	2015	То	tal
	proposed	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)	Proposed under which Prog (Convergence)	No. of works / activity taken up	Cost (Rs.In Lakhs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
								V. Land [Developm	ent Contd								
V.4	Land Development and Island Cleaning (ha)	2	0.096	DSP	3	0.144	DSP	2	0.096	DSP	3	0.144	DSP	2	0.096	DSP	12	0.576
V.5	Coconut Compost Pit	20	0.3	ADF	15	0.225	ADF	10	0.15	ADF	15	0.225	ADF	15	0.225	ADF	75	1.125
								V	I. Other W	orks (
VI.1	Coconut Climbing	0	0	NA	0	0	NA	0	1.25	ADF/CB	0	1.25	ADF/CB	0	1.25	ADF/CB	0	3.75

Note: PRWSS - Protected Rural Water Supply Scheme,. ADF - Agriculture Department Fund, PWD – Public Works Department, S&T – Department of Science and Technology.

DSP -= Development Scheme of Panchayat, TSC- Total Sanitation Campaign, EFD - Environmental Forestry Department, LDMF- Lakshadweep Disaster Management Fund, CB- Coconut Board Source: Computed from table No. V.7.3.a.

	Table No. V.7.5	5.b: Missir	ng Infrastructure	e / Proposed \	Vorks Bitra V	illage Dweep	Panchaya	t : FINALISED (to number o		nber of self er	mployment , e	expected ma	andays generation	on and manda	ys converted	in
							Na	me of the Islai	nd : Bitra							
SI.No	Missing								Year							
	Infrastructure/ Works			2010 – 2011					2011-2012					2012-2013		
	proposed	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
								. Water Conse	rvation							
I.1	Digging of Pond	1	0	720	12.76%	6	2	0	1440	22.21%	12	1	0	720	9.60%	6
1.2	Percolation of Well	2	0	302	5.35%	3	3	0	454	7.00%	4	2	0	302	4.03%	2
1.3	Well Recharge Pit	5	0	60	1.06%	1	5	0	60	0.93%	1		0		0.00%	0
1.4	Husk Burial	3	0	432	7.66%	4	4	0	876	13.51%	7	3	0	432	5.76%	3
1.5	Rain Water Harvesting Tank	10	0	480	8.51%	4	8	0	384	5.92%	3	9	0	432	5.76%	3
						II	. Renovat	tion of Traditio	nal Water bo	odies						
II.1	Pond Renovation	4	0	960	17.02%	9	2	0	480	7.40%	4	2	0	480	6.40%	4
II.2	Well Renovation	3	0	216	3.83%	2	4	0	288	4.44%	2	3	0	216	2.88%	2
								III.Rural conne	ectivity							
III.1	Road Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SI.No	Missing								Year							
	Infrastructure/			2010 – 2011					2011-2012					2012-2013		
	Works proposed	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	No of works/ activity taken up	Expected No of Self employment (No in Lakhs)	Expected mandays generation	Weightage	Mandays converted in to No of persons
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
							IV	V. Flood Contro	ol							
IV.1	(Anti Sea Erosion Work) Hollow Block Repair	0.5	0	1920	34.03%	17	0	0	0	0.00%	0	0	0	0	0.00%	0
IV.2	Sea Shore Plantation (ha)	0	0	0	0.00%	0	0.99	0	1176	18.14%	10	0.99	0	1176	15.69%	9
IV.3	Sea Mouth Cleaning (m)	0	0	0	0.00%	0	0	0	0	0.00%	0	30	0	2400	32.01%	19
							V. L	_and Developm	nent							
V.1	Coconut Seedlings.	30	0	72	1.28%	1	35	0	84	1.30%	1	25	0	60	0.80%	0
V.2	Coconut Pathy	2	0	163	2.89%	1	2	0	163	2.51%	1	1	0	82	1.09%	1
V.3	Horticulture (ha)	.0	0	0	0	0	0.99	0	115	1.77%	1	0	0	0	0	0
V.4	Land Development and Island Cleaning (ha)	0	0	0	0.00%	0	0.02	0	784	12.09%	7		0		0.00%	0
V.5	Coconut Compost Pit	20	0	240	4.25%	2	15	0	180	2.78%	2	10	0	120	1.60%	1
								VI. Other Work	S							
VI.1	Coconut Climbing	0	0	0	0.00%	0	0	0	0	0.00%	0	0	0	1000	13.34%	8
	Total		0	5642	100.00%	50		0	6484	100.00%	55		0	7497	100.00%	60

Table	No. V.7.5.b: Mis	sing Infra	structure / Pro	posed Work	s Bitra Villa	ige Dweep P		: FINALISED (e		mber of self	employmen	t , expe	cted mandays (generation a	nd mandays	converted
							Nam	e of the Island	: Bitra							
SI.No	Missing								Year							
	Infrastructure / Works			2013-2014					2014-2015					Total		
	taken up	No of works/ activity taken up	Expected No of Self employment)	Expected mandays generation	Weightage	Mandays converted in to No of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	No of works	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	1		•			1	I. V	Vater Conserva	ation	•	•	I.			•	
I.1	Digging of Pond	1	0	720	8.83%	6	0	0	0	0.00%	0	5	0	3600	10%	30
1.2	Percolation of Well	2	0	302	3.71%	2	3	0	454	4.77%	3	12	0	1814	5%	15
1.3	Well Recharge Pit	0	0	0	0.00%	0	0	0	0	0.00%	0	10	0	120	0%	1
	Rain Water Harvesting		0					0								
1.4	Tank	8		384	4.71%	3	7		336	3.53%	3	42	0	2016	5%	17
1.5	Husk Burial	3	0	432	5.30%	3	4	0	576	6.05%	4	17	0	2748	7%	23
						II. I	Renovatio	n of Traditiona	l Water bodi	es						
II.1	Pond Renovation	1	0	240	2.94%	2	1	0	240	2.52%	2	10	0	2400	6%	20
II.2	Well Renovation	4	0	288	3.53%	2	3	0	216	2.27%	2	17	0	1224	3%	10
						•	III.	Rural connect	ivity		•				•	-
III.1	Road Work	0	0	0	0	0	0	0	0	0	0	0	0	0	0%	0

SI.No	Missing Infrastructure /								Year							
	Works taken up			2013-2014					2014-2015					Total		
		No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	No of works/ activity taken up	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
				1			IV. F	lood Control			•				•	
IV.1	(Anti Sea Erosion Work) Hollow Block				0.000/				1000	00.470/	15			00.10	100/	
11/2	Repair	0	0	0	0.00%	0	0.5	0	1920	20.17%	15	1	0	3840	10%	32
IV.2	Sea Shore Plantation (ha)	0.99	0	1176	14.43%	10	0.99	0	1176	12.36%	9	3.96	0	4704	13%	38
IV.3	Sea Mouth Cleaning (m)	30	0	2400	29.44%	19	40	0	3200	33.62%	24	100	0	8000	21%	63
							V. Land	d Development								
V.1	Coconut Seedlings.	20	0	48	0.59%	0	25	0	60	0.63%	0	135	0	324	1%	3
V.2	Coconut Pathy	1	0	82	1.01%	1	1	0	82	0.86%	1	7	0	572	2%	5
V.3	Horticulture (ha)	0.99	0	115	1.41%	1	0	0	0	0	0	1.98	0	461	1%	4
V.4	Land Development and Island Cleaning (ha)	0.02	0	784	9.62%	6		0		0.00%	0	0.04	0	1568	4%	13
V.5	Coconut Compost Pit	15	0	180	2.21%	1	15	0	180	1.89%	1	75	0	900	2%	7
							VI. (Other Works								
VI.1	Coconut Climbing	0	0	1000	12.27%	8	0	0	1000	10.51%	8	0	0	3000	8%	24
	Total Source: Computed from table		0	8151	100.00%	66		0	9517	100.00%	72		0	37291	100%	303

Source: Computed from table No. V.7.3.b

Tal	ble No. V.7.5.c :I	Missing i	nfrastru	cture / wor	k proposed	d Bitra Villag	e Dweep Pa	anchayat	: FINALISE	ED (Expected	d mandays	generation	, mandays o	converted	d in to numb	per of pers	sons and t	otal emplo	yment)
									Name of th	e Island : Bi	tra								
SI.No	Name of the									Y	'ear								
	Missing			20)10-2011					201	1-2012					2012	2-2013		
	infrastructure/ Works proposed	Cost (Rs.In Lakhs)	Expecte d No of Self employm ent	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1		ı	L	L	I.		1	I. Water C	Conservation	l	L	L	I.	I.	L	I.	l	
I.1	Digging of Pond	1.5	0	720	13%	6	720	3	0	1440	22%	12	1440	1.5	0	720	10%	6	720
1.2	Percolation of Well	0.63	0	302	5%	3	302	0.945	0	454	7%	4	454	0.63	0	302	4%	2	302
1.3	Well Recharge Pit	0.075	0	60	1%	1	60	0.075	0	60	1%	1	60		0	0	0%	0	0
1.4	Husk Burial	0.9	0	432	8%	4	432	1.2	0	876	14%	7	876	0.9	0	432	6%	3	432
1.5	Rain Water Harvesting Tank	1	0	480	9%	4	480	0.8	0	384	6%	3	384	0.9	0	432	6%	3	432
		<u> </u>		I.	I .	I			vation of Tr	aditional Wa	ter bodies	<u> </u>			l	<u>I</u>	I.	1	
II.1	Pond Renovation	2	0	960	17%	9	960	1	0	480	7%	4	480	1	0	480	6%	4	480
II.2	Well Renovation	0.45	0	216	4%	2	216	0.6	0	288	4%	2	288	0.45	0	216	3%	2	216
			•						III.Rural	connectivity	•	•		-	•		•		
III.1	Road Work	0	0	0	0%	0	0	0	0	0	0%	0	0	0	0	0	0%	0	0

SI.No	Name of the									Υ	ear								
	Missing			2010	0-2011					201	1-2012					2012-2	2013		
	infrastructure/ Works proposed	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
					•	•	•	1	IV. Floo	od Control	•	•			1		1	1	
IV.1	(Anti Sea Erosion Work) Hollow Block Repair	4	0	1920	34%	17	1920	0	0	0	0%	0	0	0	0	0	0%	0	0
IV.2	Sea Shore Plantation (ha)	0	0	0	0%	0	0	2.45	0	1176	18%	10	1176	2.45	0	1176	16%	9	1176
IV.3	Sea Mouth Cleaning (m)	0	0	0	0%	0	0	0	0	0	0%	0	0	3	0	2400	32%	19	2400
									V. Land D	evelopment	•	•					•		
V.1	Coconut Seedlings.	0.15	0	72	1%	1	72	0.175	0	84	1%	1	84	0.125	0	60	1%	0	60
V.2	Coconut Pathy	0.34	0	163	3%	1	163	0.34	0	163	3%	1	163	0.17	0	82	1%	1	82
V.3	Horticulture (ha)	0.096	0	77	1%	1	77	0.144	0	115	2%	1	115	0.096	0	77	1%	1	77
V.4	Land Development and Island Cleaning (ha)	0	0	0	0%	0	0	0.98	0	784	12%	7	784	0	0	0	0%	0	0
V.5	Coconut Compost Pit	0.3	0	240	4%	2	240	0.225	0	180	3%	2	180	0.15	0	120	2%	1	120

SI.No	Name of the									Υe	ar								
	Missing infrastructure/			2010-	2011					2011	-2012					2012	-2013		
	Works	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs.In Lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
				•	•				VI. Othe	er Works				•	1				
VI.1	Coconut Climbing	0	0	0	0%	0	0		0	0	0%	0	0	1.25	0	1000	13%	0	1000
	Total	11.44	0	5642	100%	50	5642	11.93	0	6484	100%	55	6484	12.621	0	7497	100%	51.997	7497

Т	able No. V.7.5	c: Mis	sing infrasti	ructure / we	ork propos	sed Bitra Vill	age Dweep	Pancha	yat : FINALI:	SED (Expe	cted man	days genera	ition, mand	lays con	verted in to nu	mber of pers	sons and to	otal employr	nent)
									Name of t	he Island	: Bitra								
SI.No	Missing										Year			_					
	infrastructu			201	3-2014					201	4-2015					To	tal		
	re/ Works proposed	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	Total Employment
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
			l l						I. Water	Conserva	ition			1		I	1	ı	
I.1	Digging of Pond	1.5	0	720	9%	6	720	0	0	0	0%	0	0	7.5	0	3600	10%	30	3600
1.2	Percolation of Well	0.63	0	302	4%	2	302	0.945	0	454	5%	3	454	3.78	0	1814	5%	15	1814
1.3	Well Recharge Pit	0	0	0	0%	0	0	0	0	0	0%	0	0	0.15	0	120	0%	1	120
1.4	Husk Burial	0.8	0	384	5%	3	384	0.7	0	336	4%	3	336	4.2	0	2016	5%	17	2016
1.5	Rain Water Harvesting Tank	0.9	0	432	5%	3	432	1.2	0	576	6%	4	576	5.1	0	2748	7%	23	2748
		•			•			II. Re	novation of	Traditiona	Water bo	dies			•	•	-	•	
II.1	Pond Renovation	0.5	0	240	3%	2	240	0.5	0	216	2%	2	216	5	0	2400	6%	10	2400
II.2	Well Renovation	0.6	0	288	4%	2	288	0.45	0	240	3%	2	240	2.55	0	1224	3%	20	1224
									III.Rura	l connecti	vity								
III.1	Road Work	0	0	0	0%	0	0	0	0	0	0%	0	0	0	0	0	0%	0	0

SI.No	Missing									Yea	r								
	infrastructu			2013-	-2014				2014-2015						Total				
	re/ Works proposed	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	Total Employment
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
									IV. Flood	Control				•					
IV.1	(Anti Sea Erosion Work) Hollow Block																		
	Repair	0	0	0	0%	0	0	4	0	1920	20%	15	1920	8	0	3840	10%	32	3840
IV.2	Sea Shore Plantation (ha)	2.45	0	1176	14%	10	1176	2.45	0	1176	12%	9	1176	9.8	0	4704	13%	38	4704
IV.3	Sea Mouth Cleaning (m)	3	0	2400	29%	19	2400	4	0	3200	34%	24	3200	10	0	8000	21%	63	8000
									V. Land De	velopment									
V.1	Coconut Seedlings.	0.1	0	48	1%	0	48	0.125	0	60	1%	0	60	0.675	0	324	1%	3	324
V.2	Coconut Pathy	0.17	0	82	1%	1	82	0.17	0	82	1%	1	82	1.19	0	572	2%	5	572
V.3	Horticulture (ha)	0.144	0	115	1%	1	115	0.096	0	77	1%	1	77	0.576	0	461	1%	4	461
V.3	Land Developme nt and Island Cleaning (ha)	0.144	0	784	10%	6	784	0.070	0	0	0%	0	0	1.96	0	1568	4%	13	1568
V.4	Coconut Compost	0.98	U	784	10%	0	/ 04		U	U	U%	U	U	1.90	U	1008	4%	13	1008
V.5	Pit	0.225	0	180	2%	1	180	0.225	0	180	2%	1	180	1.125	0	900	2%	7	900

SI.No	Missing	Missing Year																	
	infrastructu	2013-2014					2014-2015							Total					
	re/ Works proposed	Cost (Rs. In lakhs)	Expected No of Self employment (No in Lakhs)	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to no.of persons	Total Employment	Cost (Rs. In lakhs)	Expected No of Self employment	Expected mandays generation	Weightage	Mandays converted in to No of persons	Total Employment
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	VI. Other Works																		
VI.1	Coconut Climbing	1.25	0	1000	12%	8	1000	1.25	0	1000	11%	8	1000	3.75	0	3000	8%	24	3000
	Total	13.25	0	8151	100%	66	8151	16.11	0	9517	100%	72	9517	65.36	0	37291	100%	303.334	37291

Source: Computed from table No. V.7.3.c.

7.7. Comparison of Suggested / Proposed works (Wish List) Vs. Finalised Works.

As suggested and argued argues consistently we have done a systematic prioritization exercise to make the islanders feasible with in the contextual relevance of the island. The finalization has been made in order to make sure that the work would have enough of man power available with the island. In order to understand the difference between the suggested / proposed and finalised works a detailed comparison of activities has also done in the table which includes the reasons for the variance of each of the activity. The table no. V.7.6 suggests this in detail.

Table No V.7.6: Suggested / Proposed and Finalized Works

SI.No	Name of the Missing infrastructure/ Works	Suggested	Finalized								
	proposed	Proposal	Proposal	Variance	Reason for Variance						
I. Water Conservation											
1.1	Digging of Pond (No)				Ecological fragility and labour						
		15	5	10	shortage						
	Percolation of Well				Ecological fragility and labour						
1.2	(No)	43	12	31	shortage						
1.3	Well Recharge Pit				Ecological fragility and labour						
	(No)	31	10	21	shortage						
		7500	40	7450	Ecological fragility and labour						
1.4	Husk Burial (No)	7500	42	7458	shortage						
1.5	Rain Water Harvesting	15	17	2	Labour Chartaga						
	Tank (No) 15 17 2 Labour Shortage										
11.4	II. Renovation of Traditional Water bodies										
II.1	Pond Renovation	75	10	/ [Labour Chartaga						
	(No)	75	10	65	Labour Shortage						
II.2	Well Renovation (No)	555	17	538	Labour Shortage						
		III. F	Rural connect	ivity							
III.1	Road Work	0	0	0	No works						
		IV	. Flood Contr	ol							
IV.1	(Anti Sea Erosion										
	Work) Hollow Block				All works proposed have been						
	Repair	1	1	0	undertaken						
IV.2	Sea Shore Plantation				All works proposed have been						
	(ha)	3.96	3.96	0	undertaken						
IV.3	Sea Mouth Cleaning				All works proposed have been						
	(No)	100	100	0	undertaken						

V. Land Development										
	Coconut Seedlings		-		Limitation of coconut plantation					
V.1	(No)	2250	135	2115	space					
V.2	Coconut Pathy(No)	15	7	8	Land limitation and Labour Shortage					
					All works proposed have been					
V.3	Horticulture (ha)	1.98	1.98	0	undertaken					
V.4	Land Development and Island Cleaning (ha)	12	12	0	All works proposed have been undertaken					
	Coconut Compost Pit				Labour Shortage and Ecological					
V.5	(No)	1500	75	1425	Pressure					
VI. Other Works										
VI.1	Coconut Climbing	3000	3000	0	This has been taken up as a special activity					

Source: Computed form table No.V.7.3.a., V.7.3.b, V.7.3.c. V.7.5.a, V.7.5.b and V.7.5.c

7.8. Sectors & Profile of Activities Identified for MGNREGS

The following five sectors have been identified for MGNREGS activities. Under each of the sectors various activities have been finalised. The year wise break up and other details of these activities are furnished in Table No V.7.3.a, V.7.3.b and V.7.3.c

7.8.1 Water Conservation

Water conservation has been identified as one of the important sector of Bitra. The activities under this sector are converged with various on going schemes / programs of the Centre as well as various other departments under Lakshadweep Administration. The summary profile of the activities proposed under this sector is given below;

- a) Digging of Pond: A total of 5 ponds have been included which cost Rs.7.5 lakh over 5 years. This activity would generate a total mandays of 3600.
- **b) Percolation of Well:** Percolation of 12 wells has been included which cost approximately Rs.3.78 lakhs over 5 years. This would generate a total mandays of 1814.
- c) Well Recharge Pit: A total of 10 well recharge pits shall be constructed which cost around Rs.15000 over 5 years. This shall create a total mandays of 120. Well recharge pits are for improving the water level of the wells in the island.
- **d)** Rain Water Harvesting Tank (RWHT): A total of 17 Rain Water Harvesting Tanks shall be prepared in Bitra which cost Rs.5.1 lakhs over five years. This activity would generate a total of 2016 Mandays.

e) Husk Burial: A total of 42 husk burial units shall be constructed under MGNREGS which would cost around Rs.4.2 Lakhs over 5 years. Husk burial would generate a total mandays of 2748.

7.8.ii..Renovation of the Traditional Water bodies

Renovation of the traditional water bodies is the second important sector identified for MGNREGS work in Bitra Island too. Like other islands Bitra also is abundant with numerous traditional water bodies like ponds, wells etc. The summary profiles of the various activities included in this sector are given below;

- a) Pond Renovation: 10 ponds in the island shall be renovated to make it better usable for the islanders. This work shall cost a total of Rs.5 laks and generate a total of 2400 mandays.
- **b) Well Renovation**: A total of 17 wells shall be renovated which cost Rs.2.55 lakhs over five years in Bitra. This work would generate a total mandays of 1224.

7.8.iii.Flood Control

Sea erosion is one of the very important problems in the island and this affect the life of the islanders very badly. Under this sector sea mouth cleaning has been included since the islanders strongly feel that this activity can protect corals in the lagoon of Bitra. The summary details of the activities included under flood control are given below.

- a) Anti Sea Erosion Work (Hollow Block Repair): Hollow blocks in the islands shall be repaired and it cost Rs.8 lakhs. Around 1 kilometers shall be repaired. This activity shall generate a total of 3840 mandays.
- b) **Seashore Plantation**: A total of 3.96 hectares of sea shore shall be converted in to plantation. This would cost Rs.9.8 lakhs and generate a total mandays of 4704.
- c) Sea Mouth Cleaning: 100 meters of seashore shall be cleaned under the MGNREGS work. This generates a total of 8000 mandays. This work would cost Rs.10 lakhs.

7.8.iv.Land Development

Land development is also an important area identified by the islanders. This is also important since agriculture and allied activities are the leading sector that provide livelihood for the majority of the islanders. The following are the major activities / works included in this sector;

- a) Coconut Seedling: A total of 135 works shall be undertaken under this activity. This cost Rs 0.675 lakhs over years. Coconut seeding would generate a total mandays of 324
- b) **Coconut Pathi**: A total of 7 coconut Pathi units shall be developed under MGNREGS which cost around Rs.1.19 lakhs. Coconut Pathi units would generate a total of 572 mandays.
- c) **Horticulture**: Approximately 1.98 ha of land shall be designated for horticulture activities under MGNREGS in Bitra. This would cost Rs.1.96 lakhs over 5 years period. A total of 461 mandays of work shall be generated through this work in the island.
- d) Land Development and Island Cleaning: This is also an important work. Under this work a total of 1568 mandays of work shall be done. This work shall cost Rs.0.58 lakhs over next five years. A total of 12 hectares of land shall be developed in Bitra.
- e) Coconut Compost Pit: 75 coconut compost pits shall be prepared under MGNREGS in Bitra. This cost Rs.1.125 Lakhs over 5 years. A total of 900 mandays shall be generated through this work.

7.8.v.Other Works.

Those works that do not come under the above four categories are included in this other works category. The works proposed under this sector and details are given below;

a) Coconut climbing: Coconut climbing has bee included as another important activity though it does not come under the over all directions of MGNREGS since this activity has been strongly recommended by the islander's in almost all the islands. This work since is not calculated in numbers of work (But on the basis of Coconut Tree), only mandays are given. However this calculation is based on the number of coconut trees in the island and an average number of trees that a coconut climber climbs on a day. A total of 3000 mandays shall be generated under coconut climbing costing a total of Rs.3.75 lakhs.

7.9. Sector Wise Distribution of Cost and Mandays Generated

The sector wise cost and mandays of Bitra Island is worked out in table no.V.7.7. The island does not have rural connectivity related works. Flood control and water conservation related works are the leading works in the island. The diagrams no. V.7. I & V.7.ii explain the case in detail.



The perspective plan propses husk burial under MGNREGS

Table No: V.7.7: Sector wise cost and Mandays distribution - Bitra Island (FINALISED)															
Employable	Cost and Mandays Generation (Cost in lakhs & Mandays in number)														
Sectors 2010		10-2011 20		-2012	2012	2012-2013		2013-2014		2014-2015		Total		Percentage	
	Cost	Mandays Created	Cost	Mandays Created	Cost	Mandays Created	Cost	Mandays Created	Cost	Mandays Created	Cost	Mandays Created	Cost	Mandays Created	
Water Conservation.	4.1	1994	6.02	3214	3.93	1886	3.83	1838	2.85	1366	20.73	10298	31.72%	27.62%	
Renovation of Traditional Water Bodies.	2.45	1176	1.6	768	1.45	696	1.1	528	0.95	456	7.55	3624	11.55%	9.72%	
Rural Connectivity.	0	0	0	0	0	0	0	0	0	0	0	0	0.00%	0.00%	
Flood Control.	4	1920	2.45	1176	5.45	3576	5.45	3576	10.45	6296	27.8	16544	42.53%	44.36%	
Land Development.	0.89	552	1.86	1326	0.54	339	1.62	1209	0.62	399	5.53	3825	8.46%	10.26%	
Other works	0	0	0	0	1.25	1000	1.25	1000	1.25	1000	3.75	3000	5.74%	8.04%	
Total	11.44	5642	11.93	6484	12.62	7497	13.25	8151	16.12	9517	65.36	37291	-	-	
Percentage	17.53	15.13%	18.25%	17.39%	19.30%	20.10%	20.26%	21.86%	24.66%	25.52%	-	-	100.00%	100.00%	

Source : Computed from table nos. V.7.5.a, V.7. 5.b. & V.7.5.c Information provided by the Islanders during the field visit- Consolidated

Other Works (5.74%)
Land Development (8.46%)

Renovation of Traditional Water Bodies (11.55%)

Rural Connectivity (0)

Diagram No.V.7.i :Sector Distribution of Cost

Source: Computed from Table no V.7.7

Other Works (8%)

Land Development
(10%)

Renovation of
Traditional Water
Bodies (9.72%)

Flood Control
(44.36%)

Diagram No.V.7.ii: Sector Distribution of Mandays

Source: Computed from Table no V.7.7

7.10. Implementation Schedule and Calendar

The table provides an implementation calendar. The implementation calendar has considered the following factors

7.10.1. Seasonality of the island and the labour availability: Work planning has been done keeping in mind the seasonality of the island. Monsoon season are the months with peak availability of labour. Based on the availability we have classifies the labour availability seasons in to low, medium and peak. During monsoon since people do not get involved in fishing activities the fishermen are also available for alternative works. Since there is a trend of male labourers undertaking hard labour the works are planed in those months with highest availability of male labour force.

7.10.ii. Religious Festivals and Practices (Ramadan & Fasting): During the festival days, especially during festivals like Ramadan, people do not prefer to get involved in to hard labour. This is because people fast during Ramadan and so is not appropriate to get in to hard labour. Therefore those works that need hard labour is not planned during Ramadan.

7.10.iii. Gender Issues and women participation in work: While developing the calendar we have also considered the work culture practices of women in Bitra. Those works that are heavy are planned during the peak month when larger male work force is available in the island.

7.10.iv. Material Transportation —Cost effectiveness: We have also considered the problems and risks associated with the transportation of the materials while formulating the work plan. The transportation of the materials needs to be done before the monsoon and has to be stored appropriately.

7.10.v. Seasonality of Agricultural Crops: We have considered the seasonality of some of the agricultural crops like vegetables, while distributing the works. Since the works like horticulture is closely linked to these agricultural works this activities are also distributed considering the agricultural crop seasonality.

7.10.vi. Migration to Chetlat Island during Monsoon: It has been told by the islanders during the field trip that they migrate to Chetlat during monsoon because of the safety reasons. More over since this is a small island often it gets isolated during monsoon because of the lack of adequate transportation facilities. This could also be a result of lack of employment opportunities during the monsoon months in the island.

Based on the above considerations the following work implementation calendar has been prepared. However when we prepared this calendar care has been given to distribute the work across the year with out making any month completely free of work. This is mainly to ensure, at least a few working days available to the most needy as and when they demand. Therefore in a few cases while considering the above four factors we are forced to make some amount of compromise in work distribution. The work implementation calendar shows *peak*, *lean* and *no work* months. Peak months are showed with dark gray fill, lean months with light gray fill and the off months with no fill in the respective month columns. The table also suggests the total mandays required for various works and the average mandays per unit of work. The table suggests this in detail.



The perspective plan proposes protection of such areas under MGNREGS

Table No.V.7.8: Implementation Calendar

Activities Proposed	Target	Unit	Labour in	Average							Months					
·			Mandays	Mandays / unit	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar
			Required	of work.												
I. Water Conservation																
I.1. Digging of Pond	5	Number	3600													
I.2. Percolation of Well	12	Number	1814													
I.3. Well Recharge pit	10	Number	120													
I.5. Husk Burial	42	Number	2748											_		
1.6. Rain Water Harvesting Tank	17	Number	2016													
	II. Renovation of Traditional Water bodies															
II.1. Pond Renovation	10	Number	2400													
II.2 Well Renovation	17	Number	1224													
			ļ	I2. Rural Conn	ectivi	ty										
				No work												
				IV. Flood Co	ntrol											
IV.1. Anti Sea Erosion Work	1	Kilometer	3840													
(Hollow Block Repair)																
	3.96	Kilometer	4704													
IV.2. Seashore plantation																
IV.3. Sea Mouth Cleaning	100	Meter	8000													
			,	V. Land Develo	opmei	nt										
V.1 Coconut seedling	135	Number	324													
V.2. Coconut Pathi	7	Number	572													
V.3 Horticulture	1.98	Hectare	461													
V.4. Land Development and Island	12	Hectare	1568													
Cleaning																
V.5. Coconut Compost pit	75	Number	900													
VI. Other																
VI 1. Coconut Climbing			3000													

Source : Discussion with Islanders, Department Officials and VDP Members of Bitra

Peak Season

Learn Season

Zero Work

7.11 Convergence of the activities

The convergence of activities suggest the larger inclusion of the activities proposed under MGNREGS with various on going development schemes of Panchayat and other various departments. Convergence in a way mutually strengthens the activities of MGNREGS and the similar activities in the other departments. More over convergence facilitates to enlarge the out reach while minimizing the cost. Thus the efficiency of the implementation of the various schemes also shall be improved through convergence. Convergence also helps in avoiding duplication of the schemes and programs. The table V.7.9. detail the convergence of the various works suggested under the MGNREGS in Lakshadweep.

Table No.V.7.9: Convergence Matrix

Activity	Convergence Scheme / Program							
I. Water Conservation								
I.1 Digging of Pond	Protected Rural Water Supply Scheme (PRWSS)							
I.2.Percolation of Well	Protected Rural Water Supply Scheme (PRWSS)							
1.3. Well Recharge Pit	Protected Rural Water Supply Scheme (PRWSS)							
I.4. Husk Burial	Agriculture Department Fund (ADF)							
I.5. Rain Water Harvesting Tank	PWD & Science and Technology Department							
II. Rend	II. Renovation of Traditional Water bodies							
II.1. Pond Renovation	Development schemes of the Panchayat (through Scheme Transfer)							
II.2 Well Renovation	Protected Rural Water Supply Scheme (PRWSS)							
	III. Rural Connectivity							
	No Work Suggested							
IV. Flood Control								
IV.1. Anti Sea Erosion Work	Lakshadweep Disaster Management Fund (LDMF) / PWD							
(Hollow Block Repair)								
IV.2. Sea Shore Plantation	Environmental Forestry Department (EFD)							
IV.3 Sea Mouth Cleaning	Lakshadweep Disaster Management Fund (LDMF) / PWD							
V. Land Development								
V.1. Coconut seedling	Agriculture Department Fund (ADF)							
V.2. Coconut Pathi	Agriculture Department Fund (ADF)							
V.3. Horticulture	Rashtriya Krishi Vikas Yojana (RKVY)							
V.4. Land Development and Island	Development Scheme of Panchayats (DSP)							
Cleaning								
V.5. Coconut Compost Pit	Agriculture Department Fund (ADF)							
VI. Other								
VI 1. Coconut Climbing	Agriculture Department Fund (ADF) / Coconut Board (CB)							

Source: Discussion with Department Officials and VDP Members of Bitra

The convergence of various works has been done with the relevant departments or schemes that already have similar programs or activities. It would optimize the cost as well as the output. The major departmental convergence include the Public Works Department, Agriculture Department, Coconut Board , Department of Panchayats and animal husbandry departments , Fisheries, education and district disaster management unit. Various schemes and activities of these departments are proposed under the convergence.

7.12. Work Output and Outcome

The out put and outcome of each of the works suggested under the MGNREGS is given in the table No. Out put is the immediately result of the implementation of the activity and out come is the long term impact of the activity. Out put is measurable and outcome is more over broader impact of the implementation of the activities. Outcome also some times impacts the other areas. These are characterized under the each of area identified for work and the works under each of the area. Some of the important outcomes include the availability of sustainable employment opportunities, improved work dignity of the unskilled labour, effect of the climate change management and disaster mitigation efforts.

Table No.V.7.10: Work Output and outcome

Work	Out Put	Expected Outcomes							
I. Water Conservation									
I.1. Digging of Pond	5 ponds are prepared and are made available for the islanders for use.	Improved access to water for the islanders. Better access to safe drinking water to the islanders. Almost 90% of the islanders are provided with safe drinking water.							
I.2. Percolation of Well	12 new wells have been made available to the islanders.	Improved access to water for the islanders. Better access to safe drinking water to the islanders. Almost 90% of the islanders are provided with safe drinking water.							
I.3. Well Recharge pit	10 Recharge pits constructed which is capable of preventing draining of rain water storing water for recharging of water bodies	Recharging of wells and improved availability of drinking water.							
I.4. Husk Burial	42 Husk Burial units are prepared and are fully functional.	The commercial use of husks and income opportunity for the islanders from the coconut husk. It could promote livelihood through the processing of coconut husk. Prevent the growth of mosquitoes Mosquito							
I.5. Rain Water Harvesting Tank	17 rainwater harvesting tanks ready for collecting and storing rain water during monsoon.	Best use of the natural water sources and the water harvesting facilitate adequate water provided to all the islanders.							

	II. Renovation of Traditional Wat	er bodies								
II.1. Pond renovation	10 ponds have been renovated and made available for use.	Better quality of water is made available to all the islanders with improved access to safe drinking water.								
II.2 Well renovation	17 wells have been renovated and are available for use to the islanders.	Better quality of water is made available to all the islanders with improved access to safe drinking water								
III. Rural Connectivity										
	Nil									
	IV. Flood Control									
IV.1 Anti Sea Erosion Work (Hollow Block Repair)	1 kilometers of Hollow Bricks in the seashore has been repaired.	Sea erosion shall be minimized minimized. Protecting the island from the effects of disasters. Reduced vulnerability to disasters.								
IV.2. Seashore Plantation	3.96 hectors of sea shores is put under various plantations.	Prevention of sea erosion and protection of the island from disasters.								
IV.3. Sea Mouth Cleaning	Sea mouth one location has been cleaned.	Corals in the island lagoons could be protected better.								
	V. Land Development									
V.1. Coconut seedling	135 coconut seedling planted and is ready for replanting in the island.	Availability of quality breed of coconut platys for islanders to replace the old ones with better productive ones.								
V.2. Coconut Pathi	7 Coconut Nurseries are developed with adequate capacity to grow various species of coconut	Availability of quality breed of coconut s for re[planting of coconut trees. Improved productivity of coconut in the long run and better income.								
V.3.Horticulture	1.98 hectors of land are put under horticulture cultivation/ This is linked with the kitchen gardens in the island.	Alternative livelihood through horticulture development. Availability of quality horticulture products in the island at a reasonable price.								
V.4. Land Development Island Cleaning	12 hectors of land in the island shall be developed and clened.	Tourists shall be attracted and the island shall be made better livable.								
V.5. Coconut Compost Pit	75 coconut compost its shall be prepared.	The productivity of coconut and the water level of the island								
VI. Other										
VI.1. Coconut Climbing	3000 mandays are provided for coconut climbers and a team of coconut climbers are made available for timely plucking of coconuts.	Coconut climbers get better remuneration and their dignity is improved.								

Source: Discussion with Department Officials and VDP Members of Bitra

7.13. Over all Outcomes of MGNREGS

The following are the major outcomes of the MGNREGS activities in the island.

7.13.1. Inter sectoral linkages and strengthening of networks: MGNREGS , its convergence and various activities facilitate strengthening of the inter sectoral linkages and the interrelationship of the activities and its link to various other schemes , departments and programs better the impact

of the various schemes including MGNREGS. The convergence with various other schemes also strengthens the backward and forward linkages of the various development interventions.

- **7.13.ii. Regular Income:** MGNREGS provide a source for sustainable income through proving wage employment opportunities for the unskilled labourers. The guaranteed employment for a maximum of 100 days for a family provides in a way a guaranteed income for 100 days providing livelihood security. Since the payment is done on weekly basis the work is considered by the rural poor as equivalent to a formal sector job.
- **7.13.iii. Effect of Agriculture**: Since agriculture and associated activities are the priority areas under the MGNREGS the scheme is a boost of the agriculture sector across the country. There is an opportunity to even develop agriculture labour work more or less similar to the level of a formal sector employment because of the MGNREGS.
- **7.13.iv. Tradability of Island**: Since a number of works are done towards the development of the local area the tradability of the island also improves significantly because of MGNREGS activities. The beautification of the island through infrastructure building and development of various amenities like drinking water sources could play an important role in attracting tourists and other external investors.
- **7.13.v. Traditional Agrarian Practices are Preserved**: Protection of the traditional again practices and green farming is one among the very important outcomes of MGNREGS works in the island. A majority of the activities proposed in the plan mainly strengthen the traditional economic supportive systems based on agrarian practices & develop new mechanisms to further strengthen the agricultural practices. Apart from this the conservation of land water and bio mass through the various activities is a unique outcome of the MGNREGS. The promotion of various green production initiatives also shall strengthen the ecological base of the local economy.
- **7.13.vi. Poverty Reduction:** The over all poverty reduction through employment generation is an important outcome of the MGNREGS activities in the island and across the country. This also develops an effective plat form to generate savings habits among the informal sector workers in the

island. Creation of sustainable job opportunities through guaranteed job for a total of 100 days a year for a family in fact is also a step towards provision of sustainable employment and income to the low income families who mostly belong to the unskilled labour category.

7.13.vii Women Empowerment: Since the wage rate disparity is removed under the MGNREGS the activities, the scheme paved the way for empowerment of women. Women get a regular and decent income from wage labour and this provides better dignity for women. Provision of equal pay for same work for both women and men is an import feature of MGNREGS and this facilitates better wages for women.

7.13.viii. Traditional Nature of the Island: The traditional culture, practices and habits are preserved while preparing the plan. The plan instead of developing alternative or new systems attempt to strengthen the existing traditional systems. Strengthening of the traditional economic potentials of the island facilitate up keeping of the village culture while ensuring the faster development. The traditional economic activities are complements with additional asset building and other important works ion the island. This strengthens the traditional economic sectors of the island.

7.13.ix. Capacity Building of the Village Deep Panchayats: Since the program implementation of the scheme is mainly done by the Panchayats the credibility of the Panchayats as well as its capacity is enhanced. This is probably first time in the island that the Panchayats are given a larger stake in labour planning at the local level as well as managing of a very large amount of budget. The recognition of the Panchayat increases since Panchayats have more finances and are capable of providing employment to the people.

7.13.x. Disaster Mitigation and Climate Change Management: Most of the islands are vulnerable to disasters. The works proposed under the MGNREGS therefore also in the long run would strengthen the disaster mitigation and climate change management efforts of the island. The combination of activities that are suggested through the MGNREGS have an important link to the over all disaster mitigation and climate change management efforts and it would supplement the ongoing efforts in these areas.

7.14. Concluding Remarks

National Rural Employment Guarantee Scheme (MGNREGS) is one of the novel initiatives to provide sustainable employment opportunities for the unskilled labourers across the country. This MGNREGS perspective plan of Bitra Island identified five major areas, which needs 37291 mandays and a budget cost of Rs.65.36 lakhs. The plan provides a road map of implementation. However further technical specifications needs to be worked out with the help of various other governments departments like PWD, Agriculture department etc. The technical support shall be provided through various departments like PWD. The scheme strengthens the women empowerment efforts through providing space for equal pay for both men and women. Most important to say that it would strengthen the local economic base of the island and make the economically active sectors more productive. It is further recommended to incorporate the components of this perspective plan in to the over all district plan document as well as the various plan documents of the respective departments whose activities are included in the convergence proposal of the various MGNREGS activities proposed for the Bitra Island.



Scope for similar water conservation works under MGNREGS