

# Comprehensive Revival of Millets Program – Tribal areas

Report for the Probation period : February to April 2016

Location of the Project:  
Dumbriguda Mandal  
Visakhapatnam District

Report Submitted to  
ATMA, Department of Agriculture, & WASSAN  
Visakhapatnam District  
Andhra Pradesh

Report Prepared by

**VIKASA**

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## PART - 1

### Preparation for the Program Initiation, preparedness for Kharif 2016, in particular

#### A.1 Identify 10 Gram Panchayats (GPs)

*Attach in the Annexures:*

##### 1.1 List of GPs selected (village list attached in Annexure)

1. Kinchumanda
2. Pothangi
3. Arama
4. Laigonda
5. Guntagannela
6. Rangilasingi
7. Sagara
8. Gasaba
9. Korrayi
10. Kollaput

##### 1.2 Map of the mandal and the villages selected

*Pl see in the annexures section*

##### 1.3 What is the process of selection of the GPs? Why these particular GPs are selected (what advantages in selecting these GPs)?

Vikasa is working in Dumbriguda mandal since the year 2000 and implementing Tribal development projects such as TDF-Maathota, Promotion and propagation of millets etc... Based on the experience with different GPs and performance of village development committees we finalised GPs for the programme.

There are 18 panchayats in the Dumbriguda mandal. Out of the total panchayats, in the first year, as suggested by the LTA, we wanted to initiate the work in 10 panchayats and slowly extend the initiatives to other panchayats in the consequent years.

The selected panchayats grow less acreage of millets in the mandal. The main crop in these mandals is paddy with irrigation. So wherever the dryland is available, we want to promote the millet cultivation. Even in Rabi season also, there is some scope to promote millets with critical irrigation facility. Hence we identified these panchayats.

## A.2 Key Staff details for this Millets Program

Sno	Role	Name	Designation	Education	Full / Part time	Contact Details			Are they joined in Siridhanyam google group (Yes / No)
						Mobile	Email	WhatsApp	
1	Overall Decision making related to the program	P.viswanadham	Director, Vikasa	MSc in Agriculture and Diploma in horticulture	Full	9866118877	vikasaindia@gmail.com	9866118877	NO
2	Point Person to LTA / ATMA	Siragam.Nageswararao	Coordinator	B A	Full	9493426835	<a href="mailto:Nageswararao.siragam@gmail.com">Nageswararao.siragam@gmail.com</a>	9493426835	Yes
3	Full time field coordinator for the Mandal 1 mention separately)	Siragam.Nageswararao	Coordinator	B A	Full	9493426835	<a href="mailto:Nageswararao.siragam@gmail.com">Nageswararao.siragam@gmail.com</a>	9493426835	Yes
4	Data management/ Reports preparation	K. Prasada rao	Team leader, Maathota programme	DCE	Full	9492824897	vikasaindia@gmail.com	9492824897	NO
<b>Other staff of NGO &amp; Consultants who may be involved in Trainings/ Programs</b>									
5		P V Suriapparao	Coordinator	ITI	Full	9492220358	<a href="mailto:Vikasa_India@yhoo.com">Vikasa_India@yhoo.com</a>		NO
6		PML Naidu	Coordinator	Intermediate	Full	8331912611	<a href="mailto:Vikasa_India@yhoo.com">Vikasa_India@yhoo.com</a>		NO
7		Dr S Kiran	Consultant	PhD in Agriculture	Part time	9490213293	<a href="mailto:Kirans.304@gmail.com">Kirans.304@gmail.com</a>		Yes

### A.3 GP Level Participatory Situation Analysis

Annexures:

#### 3.1 List of Community Organisations in the selected GPs and their brief status (see Table in Annexures)

• <b>Nodal CBO</b>	Apex committee over VDCs at village / GP level
• <b>Which is the Nodal CBO for the program</b>	A project level committee with active VDC leaders – Project committee
• <b>Name</b>	Dumbriguda Madnal Millet development committee
• <b>Type of CBO</b>	VDC – Village development committee, not registered
• <b>Background of the CBO (Describe) (When it has started? What is the purpose? Who are the promoters)</b>	Vikasa promoted Village development committees (VDCs) between 2008 to 2009 for development of villages. These VDCs monitored TDF – Maathota programme at village level, mobilised NREGS works, resolved conflicts between villagers as well as between families in the village, addressed drinking water issues etc...
• <b>Describe the process you have followed for Participatory Situation Analysis</b>	

### B.1. Mandal Level Stakeholders Involvement

B.1. Meetings conducted at Mandal level with different stakeholders

S.No.	Event Name	Date	Location	Participants	Issues/ Themes discussed
1	Isakagaruv	11-4-16	Laiganda	3 Villages 35 Membares	How to improve millet consumption and productivity
2	K.Jamaguda	6-4-16	Guntaganela	3 Villages 95 Membaes	How to improve millet consumption and productivity

3	Gadyaguda	16-4-16	Sagara	4 Villages 28 membares	How to improve millet consumption and productivity
4	Kollaput	16-5-16	Kollaput	4 Villages 32 members	Seed centre for the panchayat, millet productivity
5	Sukraput	14-5-16	Kinchumanda	5 Villages 35 membares	Seed production and millet productivity
6	Logili	18-5-16	Gasaba	2 villages 23 membares	Millet based recipes and trainings
7	Rangilisingi	21-4-16	Rangilisingi	4 Villages 50 members	How to improve millet consumption and productivity
8	Athriguda	10-5-16	Pothangi	3 Villages 26 membares	Ready to eat foods with millets in nearby tourist centre
9	Jakaraguda(Korrai)	9-5-16	Korrai	3 Villages 42 Membares	How to improve millet consumption and productivity
10	Badimela	15-4-16	Arama	3 Villages 30 membares	How to improve millet consumption and productivity

B.2. What are the issues discussed / emerged during the meetings at Mandal level?

1. The comprehensive project is with the support of Dept of Agri and need to imprve acreage of millets by bringing in fallow lands to cultivation
2. Procurement of breeders seed for seed production
3. What support systems are available for millet seed centres from the Government
4. Nutritional importance of millet crops in reducing malnutrition among children
5. How to improve the productivity of millets?

B.3 FA met the following officials at the Mandal Level and briefed about the program.  
(Please fill in the officials)

S.No.	Official	Department	Name	Did the FA meet her/him and briefed about the program? Yes/ No
1	Agricultural Officer	Dept of Agriculture		

1		A D	Nagapadhmarao	No
2	A O		Anasuya	Yes
3	A E O		Kiran	Yes
4	ASO	To collect data	Chandramma	Yes

### C. Baseline Surveys

Any attempts done on this? If so describe. (A program level baseline is yet to be initiated by the LTA)

A baseline study was conducted on the issues related to millet production, consumption, marketing and value addition four years ago under the IDRC funded project supported by WASSAN. The salient findings of the baseline area hereunder:

Dumbriguda falls under high altitude tribal zone with high rainfall. The soils are red sandy loams interspersed with clayey loams with slope ranging from 2% to 40%. Though this is completely a rainfed location the rainfall is high.

This mandal is predominantly inhabited by 93% of tribal farmers comprising Nookadora, Kotiya, Kondakammari, Bagatha, Kondh, Muliya, Kondadora and Valmeeki tribes. The major occupation of the people is agriculture (90%) and the rest of the 10% are agricultural labours.

The baseline study done in this location in 2012 during the months of March to July comprising 150 responding farmers.

From the total 150 households, 81.33% belonged to below poverty line followed by 17.33% above poverty line and the rest of small proportion of 1.33% fell under the Antyodaya category of economic class.

An overwhelming majority (82%) of the respondent households were members of some social groups. This is mainly because of the initiative taken up by the Government of Andhra Pradesh, to initiate Self Help Group (SHG) formation and link up most of the services through these SHGs in the rural areas. Besides, the farmers clubs were also formed under the initiative of VIKASA through NABARD's farmers' club programme and some of the clubs have also been linked to Village Development Committees of the WADI programme.

70 percent of the respondents had pakka houses followed by 28 percent with kachcha houses. In the recent years, the Govt of Andhra Pradesh has sanctioned for construction of pakka houses coupled with employment through NREGA (National Rural Employment Guarantee Act) to work in constructing their houses. This is one of the good indicators of access to better livelihoods.

As expected, slightly more than half of the total household members (53.15%) were illiterate followed by having primary school education (15.16%). It was observed that only 8.89% of the total members were found to have the collegiate education.

It was observed from the data that, out of the total 150 households, 105 (70%) had plough bullocks. As there were not enough bullocks with all of them, they are helping each others in land preparations and other activities. Goat rearing is also an income generating activity and 47.3 percent had possessed goats / rearing goats. It was also observed that, 24.63% possess native cows which are also used for land preparation purposes in this area. Generally milking is not done for cows and the calves are allowed to take all the milk.

Millets are important food crops in the project location and it was found that, 77.3 percent of the respondent households cultivated finger millet last year, 70.7 percent cultivated little millet, 55.3% cultivated nizer crop, 21.3% cultivated ricebean and 22% cultivated rice. From the results, we can infer that finger millet and little millet are important small millet crops. Earlier nizer was also an important crop but due to cuscute parasite infestation, increasing lands under vegetable crops and low productivity of Nizer, supplying of oil through PDS resulted in decline in the Nizer cultivation. However, this is still being cultivated by more than 50% of the households due to its high market price and its demand, but is confined to areas where vegetables are difficult to grow such as undulating terrains where provision of irrigation is difficult for vegetable cultivation.

The baseline data showed that, majority of the millet growers (97.41%) still grow local varieties and only a meagre (2.59%) cultivate improved varieties. Despite some finger millet varieties have been supplied by the local administration, they have not reached most of the farmers. As part of the project activity, VIKASA made available the improved variety of finger millet to more than 1000 farmers in the year one by procuring the seed from Agricultural Research Station, Vizianagaram. Later the farmers repaid in kind the double the quantity that they received from VIKASA and the same was distributed to another 2000 farmers. Later it was learnt that the seed was spread to far off places like Paderu, GK veedhi mandals also through the relatives / friends from the project location.

It was observed that, majority of the finger millet growers (93.97%) keep their own seed for cultivation and only few were found to have obtained seed from other sources such as relatives (6.03%).

It was observed from the study that, 87.5% of the total produce from cultivation is being used for own consumption whereas the rest of the 12.5% is used for seed purpose (either for own use or to give others). The average quantity of the millet consumed was found to be 151 kg per household as food and 17.1kg for seed purpose. This clearly shows that they have been using higher seed rates which was also observed in the field. Storage of seed is generally done in poly bags or cement bags with occasional sun drying. But due to heavy humidity, inbreeding depression, it was observed that the germination percentage of their seed is low and hence they are using more quantity of seed for sowing than is actually recommended.

When asked about the constraints faced by the farmers right from production, harvesting, post harvest and marketing constraints faced by them, almost half of them (43.1%) expressed that, ploughing and tilling of lands was difficult due to stony land followed by small majority of the farmers (27.59%) pointing low rains during the cultivation period was the major constraint in finger millet cultivation, followed by other reasons.

69% of the respondents expressed that rains during harvesting of millet crops are major problem followed by difficulties in harvesting by plucking the fingers from the plants (21.5%) as the problem faced during the harvesting.

In order to assess the frequency of millet consumption, all the respondents were asked about when was this millets were consumed last time. Great majority of the respondents (87.1%) consumed on the same day when the questionnaire was administered. However the consumption was limited to finger millet, whereas the other millets like little millet and foxtail millets were less consumed compared to finger millet.

Despite being consumed daily, majority of the respondents (59.5%) felt that the consumption of finger millet reduced in the last 10 years whereas 14.7% felt that there was no change and 19.8% felt that there was an increase in the consumption in last 10 years.

When asked about why the decline in consumption has taken place, almost 35.3% opined that the low yields from millet crops, more than 50% opined that processing difficulties with little millet and foxtail millet, coupled with the supply of food grains (rice) through Public Distribution system (PDS) followed by lack of enough manure (17.2%), low rains leading to low yields coupled with supply of grains through PDS (13.8%) as main reasons. This clearly shows that almost half of the respondents attributed the decline to the supply of rice through PDS, of course coupled with low rains and poor yields.

A PRA conducted earlier in this mandal revealed the following information on millet cultivation in the mandal

Crop	Change in the acreage of different crops at 20 year intervals (all the %s are only indicative based on the opinion of the participants in the PRA)			
	1951	1971	1991	2011
Little millet	40%	35%	15-20%	10%
Finger millet	20%	15%	15%	15%
Dry paddy	20-30%	15-20%	10%	5%
Irrigated paddy	-	20%	40%	45%
Legumes and other crops	10%	10%	8%	2%
Vegetables	2%	2%	5%	25%

The above table clearly shows how the decline in millets happened over a period of time.



## PART - 2

### Production related (Drawing from Baselines and Action Plans)

#### A. Millet - Crop Systems in the Area

1. Brief description of the process followed and observations
2. Types of Millet Crop Systems (*give description*)

Crop System Ci,ode	Type of Land	Name of millet Crop Systems	Crops	Description of the system
1	Podu / Slope	Broadcasting	Sama,ragi,jonna, redgram, some creeper vegetables and legumes like ricebean, broadbeans	This system of cultivation attracts very low attention. Generally the seeds are broadcast, and crops are harvested as and when they are ready. However the tribals keep a watch for this piece of land to protect the field from wild animals
2	Mettu / dry land	Transplanting and broadcasting	Sama,ragi,jonna,, and some sotimes raddish is also grown as a mixed crop in the same piece of land	In this system, some people go for broadcasting. Finger millet and Little millet are mixed and broadcast. Some others transplant finger millet. In case they plan to go for a pulse crop in the rabi season, they prefer to grow short duration type of little millet which is harvested by August/ September

3	Stream bed	Transplanting during Rabi	Ragi	Generally finger millet is transplanted in this streambed so that the weed problem is low and yield is more.
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### 3. Extent of the Crop Systems

S.No	GP	Crop System Code (as in the above table)	Area (ac) extent 10 year ago	Area extent in 2015 (acres)	Main reasons for the change
1	Laiganda	All the three	116(ac)	45(ac)	Shortage of cattle for ploughing, growing more acreage under vegetables, coffee plantation, migration
2	Kinchumanda	All the three	205(AC)	165 (ac)	Shortage of cattle for ploughing, increasing acreage under Groundnut, Vegetables, coffee plantation, migration
3	Pothangi	All the three	190(ac)	136(ac)	Shortage of cattle for ploughing, growing more Groundnut, Vegetables, and coffee plantation, migration
4	Arama	All the three	175 (ac)	115(ac)	Shortage of cattle for ploughing, Groundnut, Vegetables, coffee plantation,

					migration
5	Rangilisingi	All the three	110(ac)	75(ac)	Vegetables and Eucalyptus
6	Guntaganela	All the three	80(ac)	35(ac)	Coffee and Vegetables
7	Sagara	All the three	200(ac)	110(ac)	Coffee and Vegetables
8	Gasaba	All the three	90(ac)	55(ac)	Shortage of cattle for ploughing, Groundnut, Vegetables, coffee plantation, migration
9	Kollaput	All the three	150(ac)	64(ac)	Shortage of cattle for ploughing, Groundnut, Vegetables, coffee plantation, migration
10	Korrai	All the three	210(ac)	78(ac)	Shortage of cattle for ploughing, Groundnut, Vegetables, coffee plantation, migration

## **B. Kharif Seed Plans (2016)**

1. Area seed indents collected from the villages?[ YES / NO ]

Yes and indent forwarded to LTA and AOs through Kollaput Manavitthana kendram

2. If YES, Summary of the Seed Indent for all villages in the mandal

**PI see Annexure-6**

### C. Mana Vittana Kendram (MVK)

1.	Nodal Organisation for Seed Systems / MVK		
	• Village		Kollaput
	• Gram Panchayat		Kollaput
	• Latitude		
	• Longitude		
2.	Name of Community Organisation		
	• Type of CBO		VDC (village development committee)
	• Registration Status		Unregistered
	• Functioning of the CBO		Regular meetings, Bank account and a minutes book
	• Does the CBO has any funds of its own?		NO
	• Is this village same as the nodal village identified for procurement by MARKFED (that is to be planned later)?		Not applicable
3.	Discussion or Events conducted in the GP to select the MVK nodal village / CBO		
Sl. No.	Event Date	Description of the Event	Participants
1	May 2016	A meeting with VDC leaders of Kollaput had been organized	Kollaput villagers and VDC leaders

#### 4. What are the systems of seed production / distribution / exchange arrived at? (Give a brief description)

Seed production – With the support of ARS, Vizianagaram, Srirachthanya seed multiplied in Kollaput village in 15 acre. It will be distributed to other needy farmers on repayment basis and the seed thus generated will remain with the seed bank.

Efforts are on to identify a committee comprising local farmers to look after the seed multiplication and seed banking operations.

#### 5. How does the Seed Centre earn and pay for its maintenance and services?

Seed can be multiplied by the farmers committee. However the role of LTA and FA is very critical in the initial stages of the seed banking operations in networking with the AP seeds so that a sustainable seed bank is established.

Seed centre will sell portions of its seed to AP seeds or to the needy farmers and attend for maintenance.

**6. Does the Seed Centre have storage space? By when, it can arrange for one?**

As of now the seed is stored at the farm level in a decentralized way. However, a structure and storage facilities are to be provided in order to sustain the seed bank as it would be difficult for a single farmer to take up the storage and occasional drying of seeds. Once the project budget is sanctioned, we will plan to procure the storage structures and find a suitable place for storage in consultation with the CBO and farmer seed producers.

**D. Participatory Varietal Trails**

*Preparations done so far?*

**1. How are you planning to implement Participatory Varietal Trials?**

Project staff has experience in varietal trails.

Vikasa actively participated in varietal trails of ARS, Vizianagaram in Araku Valley and Dumbriguda mandals

Vikasa was one of the partners from India in action research programme on Millets through WASSAN in Andhra Pradesh supported by IDRC implemented in South Asian countries.

Based on the experience and previous results we will conduct participatory varietal trails.

**2. What are the crops /varieties you have planned for trials: No of plots/ size in acres?**

S no	Crop	Varieties proposed	No of farmers identified
1	Finger millet	Sri Chaitanya, Bharati, Pedda chodi & Hima	<b>10</b>
2	Foxtail millet	Suryanandi, Seetha korra	<b>5</b>
3	Little millet		<b>5</b>
4	Finger millet	All local & improved varieties	<b>1</b>
5	Foxtail millet	All local & improved variety	<b>1</b>

## PART - 3

### Preparation for *Kharif* (2016-17)

#### A. Farmers' Field Schools

##### 1. What efforts have been done in this regard?

As part of the Participatory varietal trials conducted earlier, we had organized FFS in Little millet and Finger millet crops. Besides, VIKASA has a long experience in organizing NPM trainings and SRI trials. All these three (Varietal trials, SRI and NPM) specifically focussed on the FFS approach and thus our staff are well experienced in organizing the Farmer field schools.

##### 2. Have you identified 5 farmers in each of the GP (and 50 farmers in the Mandal for FFS)? [YES / NO]

A .Yes

*List of the 50 farmers is attached in Annexure 4.*

##### 3. What is your strategy for organising Farmers' Field Schools in these villages?

Farmers are oriented about the Participatory varietal trials and at regular intervals these groups will be organized to meet and discuss the performance of the different varieties under their farming situations / cropping systems and thus they will be able to take an informed choice about the different options available for them.

Besides the performance of the crops, we also will discuss the issues line value addition, marketing and Non Pesticidal management of the crop pests to that, the reception of the information is quick, effective and long lasting.

##### 4. What are the changes that you would like to try in each of the identified crop systems?

Description

SNO	Millet Crop System*	Problems	Proposed Actions to be tried in FFS
1	Podu cropping system	Low productivity of varieties, lodging of crop before harvesting due to rains, and no or low dormancy of existing varieties	The proposed varieties have beter dormancy of the seeds so, even if one or two rains do not lead to germination of seeds in the field before harvesting. This problem is more so in case of short duration type of little millet. But the earlier varietal trials did not yield any better results in terms of productivity (with Co-2 and OLM

			203 varieties). Hence we want to bring in new varieties suitable to this climatic situations.
	Mettu / Garuvu / rainfed cropping sustem	<p>Even though it is a rainfed crop, the rainfall is very high. Rains during the harvesting of local types especially the short duration type of Little millet and finger millet are badly affected.</p> <p>Heavy rains during the crop growth period leads to heavy weed infestations</p> <p>Manure is scanty for millet crops as much of it goes to vegetables and other cash crops</p> <p>Productivity of the local types is low</p> <p>Not enough threshing yards are available as crop comes up for harvesting during the same time for all farmers</p>	<p>We plan to bring in the varieties with high dormancy so that this problem could be addressed through the varital trials and FFS</p> <p>Transplanting lessens the weed problem. So will try this in comparision with the direct sown crop</p> <p>We have raised Gliricidia nursery and will be supplied to farmers for Greenleaf manure. Other better methods of composting will be introduced to get more manure enough to apply millets too</p> <p>Bringing in new high yielding varieties suitable to this location will address this problem</p> <p>Will try to procure Taurpalins for a groups of farmers either from the departmental schemes or through the MACTS society so that this problem will be addressed. This will also help in maintaining the purity of the seeds while threshing.</p>

	Stream bed	Flash floods / rains wash off the crops from stream beds	Some people go for transplanting also, but their number is miniscule. Only few villages have this option / choice to grow rabi millets in streambeds. Majority of the farmers go for paddy in these streambeds. Providing suitable drainage channels along the plots may drain out the excess water from the plots, but this needs to be tested
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*\*As identified earlier*

## PART - 4

### Soil Health Improvement

**1. Do farmers sell away their farm yard manure?**

No. But most of the manure prepared is used for paddy, vegetable crops.

**2. Are there any practices observed in application of manures to millet crops?  
[YES/NO]**

Normally farmers apply farm yard manure (FYM) for Ragi crop and majority of farmers not giving external inputs for Sama

**3. What are the present soil health management practices followed in general and in millet crops in particular?**

Millet crops are not generally manured. As they follow crop rotation, the fields where the vegetables / legumes were grown during the previous season are allotted to the millet crops. In case of short duration little millet, they broadcast the seeds in the plots that they plan to grow legumes in rabi season. As the short duration crop is harvested by August, they grow legumes in rabi from September month. In this way they manage to maintain the soil fertility of the millet growing plots.

As most of the farmers tend cattle/ sheep, the availability of manure is not a problem but it is definitely not enough to sustain the soil health and nutrition. So, they apply this manure to the high value crops that deplete the soil nutrition like vegetables, paddy and maize. Rest of the manure after meeting the requirement for these crops is applied to transplanted finger millet field.



Apart from manures, they also apply fertilizers to paddy and vegetable crops. But they are seldom applied to finger millet and never applied to little millet. Too much of fertility in little millet promotes height of the crop which eventually is prone to lodging at the time of harvesting due to heavy rains or heavy winds.

#### **4. How do you want to address the issue of soil health improvement in the selected villages and in the FFS?**

Promotion of bio-mass based manure and Gliricidia around manure pit.

##### **- Outline of the program & strategy**

In the selected villages, we would like to promote the cultivation of Gliricidia plants along the bund and on manure pits, so that more amount of manure gets generated.

In all the trainings, the issue of manuring the fields will be dealt with so that, this activity gets integrated into the most of the project activities.

##### **- Brief on how will it be operationalised?**

Farmers will be given orientation and practical trainings on better manure preparation such as preparation of Ghana Jeevamrutham, Drava Jeevamrutham, etc to apply it on millets and other crop plots to enhance the soil fertility as well as productivity of the crops over a period of time.

Weekly FFS will be organized to discuss the varietal trials, methods of better manure preparations, advantages of preparation and application of manures on farm, will be discussed in the FFS so that farmers will get a better understanding of manuring their millet crops to improve the yields

Will try to link the manure preparation to the local agriculture based rituals and practices by inculcating the inquisitiveness of the farmers on why composting millet fields

As most of the local millet crops are slender and lodging types, the manuring is not done. By bringing in new varieties suitable to the location this problem could be managed and slowly in the FFS, the behavioural changes will be brought about on importance manuring millet crops.

##### **- What is the plan of action for 2016?**

100 farmers will be identified and motivated to plant the Gliricidia cuttings on the compost pits to enhance the manure production

Trainings will be organized on better composting methods in addition to the FFS  
*A detailed workplan in an excel sheet was already sent to LTA*



## PART - 5

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### Protective Irrigation

1. Name of the village identified for Protective Irrigation.  
K.Jamaguda,Rangilisingi,Kinjeru,Kusumavalasa,Kollaput

2. Why is this village identified? Reasons for choosing this village.

Water is available for rabi crop and this can be use for critical irrigation

3. What are the water sources? Any preliminary work done?

Earlier some work has been done on use of hydromes to harvest water from a stream passing by the side of our nursery cum training centre.

In our operational villages and around the villages there are some perennial springs on the hillocks. As we promoted the orchards, ensuring the irrigation to the plants is of paramount importance especially during the summer months to save the plants from drying. Hence we initiated tapping the Gravity water from springs by setting up the storage tanks near the farmers fields. The water thus stored in the tanks was also encouraged to provide the annual crops.

## Annexures

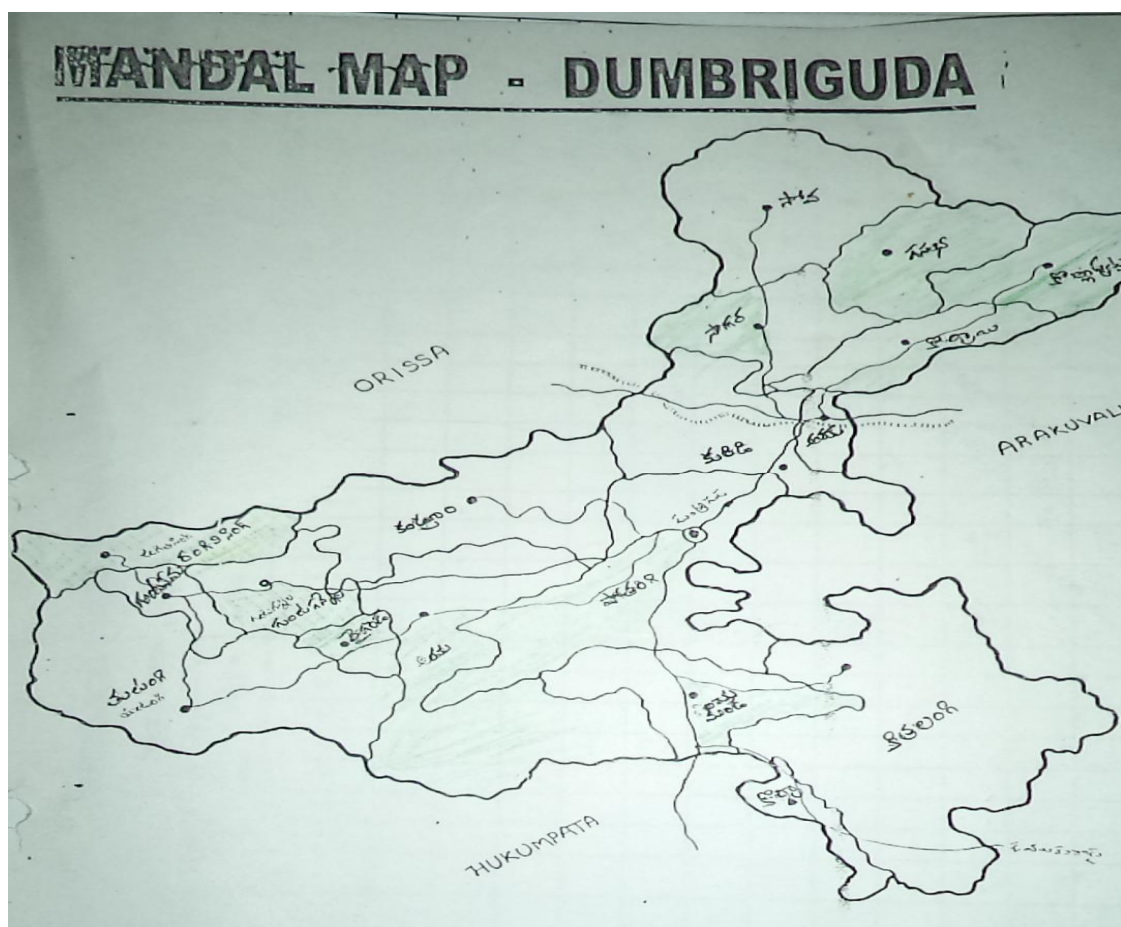
### A. List of Identified Villages

#### *Annexure- 1*

1. Identifying the program area (10 Gram Panchayats)

S.No .	GP Name	Village Name	Latitude	Longitude
1	Arama	Nandivalasa,Badimela,Thumdrumguda, M.Gondiguda,Paridi		
2	Gasaba	Jangidivalasa,Logili		
3	Guntaganela	K.Jamaguda,Boddaput Kunaput		
4	Kinchumanda	Kinchumanda,Sivanagaram,Sukraput, Gowli,Kusumavalasa,		
5	Kollaput	Kollaput,Gollorivalasa,Nandivalasa,Moniguda,		
6	Korrai	Gatharajilleda,Jamaguda,Karabali,		
7	Laiganda	Laiganda,Isakagaruv,L.Panasaput		
8	Pothangi	Gondiguda,Billaput, Dodavalasa,Amalaguda, Bhejumaravalasa,Anthriguda,Thotavalasa		
9	Rangilisingi	Rangilisingi,Kinjeru,Kujjabangi,Musirilanka		
10	Sagara	Gadyaguda,Poddaguda,Vasabanda,Similiguda , Koyamamidi		

- ## Annexure- 2





## 2. Gram Panchayat (GP) level Participatory Situation Analysis

### Annexure- 3

#### 1. List of Community Organisation in the identified GPs and their status

S.No.	Village	CBO Name	Type of CBO SHG/ VO/ Farmers group/ others (name)	Membership base (Female/ Male/ Mixed) and No of members	Functional Status (approximate) Grade A / B / C (★)
1	Gadyaguda	VDC	VDC	Male	A
2	Kollaput	Ambhethkar	Farmers club	Male	B
3	Kinchumanda	Gowramma	SHG	Female	A
4	Logili	VDC	VDC	Male/Female	B
5	Badimela	V DC	VDC	Male/Female	A
6	Rangilisingi	VDC	VDC	Male/Female	A
7	Isakagaruv	VDC	VDC	Male	A
8	K.Jamaguda	VDC	VDC	Male/Female	A
9	Gatharajelleda	VDC	VDC	Male/Female	A
10	Anthriguda	VDC	VDC	Male/Female	A

(★)

- Grade A : Functional with all books of accounts
- Grade B : Functional but needs improvement
- Grade C : Non functional

### 3. Preparation for Farmers' Field Schools

#### Annexure- 4

#### 1. Identified Farmer's List

#### Farmers identified for organizing FFS in 10 panchayats

S no	GP Name	Name of the Village	Name of the Farmres	Ragi	Sama
1	Kinchumanda	Sukraput	Sakeri Ramamurthy		sama
2			Sakeri Ramanaidu	Ragi	
3			Vanthala Donnu	Ragi	
4			Siragam Ramesh kumar	Ragi	
5	Pothangi	Anthriguda	Killo Arjun	Ragi	
6			Korra Baleswarao		Sama
7			Gollori Dombu	Ragi	
8			Gemmeli Malamnaidu	Ragi	
9			Korra Chinayya	Ragi	
10	Arama	Badimela	Thangula Jennu	Ragi	
11			Thangula Balaram	Ragi	
12		Nandivalasa	Gemmeli Balayya	Ragi	
13			Korra Seetharam	Ragi	
14			Thangula Moddu	Ragi	
15	Laiganda	Isakagaruv	Gollori Chandradas	Ragi	
16			Thangula Kondababu	Ragi	
17			Thangula Dharmarao	Ragi	
18		Laiganda	Thangula Bakrishna	Ragi	
19		L.Panasaput	Vanthala Kameshwarao	Ragi	
20	Rangilisingi	Rangilisingi	Pangi Buddu	Ragi	
21			Korra Ramanaidu	Ragi	
22		Kinjeru	Pangi Anandharao	Ragi	
23			Vanthala Kaeswarao	Ragi	
24		Musirilanka	Korra Laicon	Ragi	
25	Guntaganela	K.jamaguda	Tharmangi Jagnadham	Ragi	
26			Tharmangi Doya	Ragi	
27		Boddaput	Gullela Thirupathirao	Ragi	
28			Gullela Raghunadh	Ragi	
29			Gullela Ramu	Ragi	
30	Kollaput	Kollaput	Jetti Appanna	Ragi	
31			Korra Mohanrao	Ragi	
32			Patedora Kendhubabu	Ragi	
33		Moniguda	Chikkudu Krishna	Ragi	
34		Kollaput	Jetti Chiranjivi	Ragi	
35	Korrai	Gatharajilleda	Kindangi Narayanna	Ragi	
36			Kindangi Mahadev	Ragi	
37		Karabali	Pangi Jenabandhu	Ragi	
38			Pangi Mahadev	0	Sama



39	Kinchumanda	Kinchumanda	Allangi Chittibabu	Ragi	
40	Arama	M.Gondiguda	Dalapathi Moddu	Ragi	
41			Dalapathi Devadhas	Ragi	
42	Gasaba	Jangidivalasa	Pangi Gurumurthy	Ragi	
43			Vanthala Gopi	Ragi	
44		Logili	Korra Laicon	Ragi	
45			Korra Appanna	Ragi	
46			Korra Arjuun	Ragi	
47			Korra Mahadev	Ragi	
48	Sagara	Gadyaguda	Korra Keswarao	Ragi	
49			Korra Ramarao	Ragi	
50			Pangi Seetharam	Ragi	

The farmer and field will be finalized shortly.

## 2. List of Farmers who are conserving indigenous millet seeds

### *Annexure- 5*

Sl. No.	Village	Name of the farmer	Name of the crop seeds conserved by him/her	Have you collected seeds for varietal trials from him/her.
1	Gattarajalleda	K Narayana	Finger millet, Little millet, Bajra, rajmah, Redgram, Nizer	Will be collected in the last week of May 2016
2	Gattarajalleda	K ramana	Finger millet, Little millet, rajmah, Redgram, Nizer	Will be collected in the last week of May 2016
3	Antriguda	Korra Dumbu	Little millet, Finger millet and Foxtail millet	Will be collected in the last week of May 2016
4	Antriguda	Korra Raju	Finger millet, Little millet and Foxtail millet	Will be collected in the last week of May 2016
5	Antriguda	Korra Arjun	Little millet, Finger millet	Will be collected in the last week of May 2016
6	Chinna Anjoda	Buridi Ramamurthy	Little millet, Finger millet & Rajmah	Will be collected in the last week of May 2016
7	Boduguda	Devartha Dunnu	Little millet, Dry paddy, Cowpea	Will be collected in the last week of May 2016
8	Bhalluguda	Pottangi Mutthu	Little millet, Finger millet, Rajmah, Turmeric, Cowpea	Will be collected in the last week of May 2016

## Annexure- 6

Summary of the Seed Indent for all villages in the mandal

S no	Panchayat	Village	No. of farmers	Ragi Acres	Qty. In Kg	Foxtail millets Acres	Qty. In Kg
1	<b>Arama</b>	Nandivalasa	12	11	44	2.5	5
2		Badimela	32	32	128	10.5	21
3		Thumdru mguda	9	9	36	3	6
4		M.Gondiguda	16	16	64	4.5	9
5		Paridi	12	12	48	6	12
6	<b>Gasaba</b>	Jangidivalasa	12	12	48	6	12
7	<b>Guntaganela</b>	K.Jamaguda	68	66	264	1.5	3
8		Boddaput	14	14	56	0	0
9		Kunaput	17	14	56	2	4
10	<b>Kinchumanda</b>	Sukraput	10	28	112	14	28
11		Kusumavalasa		8	32	5	10
12		Sivanagaram	6	6	24	2	4
13		Kinchumanda	16	16	64	4.5	9
14		Gowli	8	8	83	3.5	7
15	<b>Kollaput</b>	Kollaput	11	11	44	5	10
16		Gollorivalasa	13	13	52	6	12
17		Nandivalasa	13	7.5	29.5	6.5	13
18		Moniguda	15	15	60	5.5	11
19	<b>Korrai</b>	Gatharajilleda	20	20	80	3	6
20		Jamaguda	41	39.5	156.5	21.5	43
21		Karabali	12	14	56	2	4
22	<b>Laiganda</b>	Laiganda	42	42	168	1	2

S no	Panchayat	Village	No. of farmers	Ragi Acres	Qty. In Kg	Foxtail millets Acres	Qty. In Kg
23		L.Panasaput	5	5	20	2.5	5
24		Isakagaruvu	15	15	50	5.5	11
25	<b>Pothangi</b>	Pothangi	20	20	80	0	0
26		Billaput	13	13	52	6	12
27		Dodavalasa	8	8	32	2	4
28		Amalaguda	13	13	52	5	10
29		Bhejumara valasa	13	13	52	5	10
30		Anthriguda	7	7	28	3	6
31		Thotavalasa	7	7	28	3	6
32	<b>Rangilisingi</b>	Rangilisingi	21	21	84	7	14
33		Kinjeru	31	16	64	15.5	31
34		Kujabangi	6	6	24	2.5	5
35		Musirilanka	3	3	12	1.5	3
36	<b>Sagara</b>	Gadhyaguda	29	31	124	15.5	31
37		Poddaguda	27	27	108	13	26
38		Vasabanda	16	16	64	8	16
39		Similiguda	9	9	36	4.5	9
40		Koyamamidi	13	13	52	6.5	13
41	<b>Pothangi</b>	Gondiguda	5	5	20	2.5	5
		<b>TOTAL</b>	<b>613</b>	<b>673</b>	<b>2692</b>	<b>218</b>	<b>436</b>