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# **Institute of Social Transformation**

Reg. No. Mumbai Public Trust Act 1950- F 37461, Societies Registration Act 1860- 1272

Ref. No.

Reg. No.

Mah / 1272 / 2011

To
CSR Head
TATA RALLIS INDIA
MUMBAI

Dear Madam

Find attached the brief report of Brief Report of Jal Dhan project from Latur district of Maharashtra duely stamped signed on each page. Detailed report is in final stage and will be completed at the end of the May.

Regards,

Yours faithfully,

Date:

Dr. V.V.Kulkarni.
President

**Institute** of Social Transformation

(Reg. No. Soc. Reg. Act 1860-Mah/1272 & BPT Act 1950-F37461)
'ASHA' Shahu Colony, Lane No. 11, Karvenagar, Pune -411 052



# Brief Report of Jal dhan project from

### Latur district of Maharashtra

### Current scenario of Latur:

Water is the most essential material for human survival, after air. Without water, life would not be possible. Yet, these days, clean drinking water is a scarce resource in many parts of the world, including India.

The situation in the Latur city is alarming. Everyday women have to spend 6 to 8 hours to fetch water at the distance of 2 to 3 km. In summer season, the situation further gets aggravated and almost all water sources gets dried. To get the water tanker the village gram panchayat has to make special efforts to contact political leader to get the approval for water tanker. There is no specific time of water tanker to deliver the water in village.

### Issues of Water scarcity:

Latur comes under drought prone region. A severe drought has been sweeping the Marathawada region which has resulted in lost of several livelihood resources. Loss of agriculture is a major issue of concern. Wrong agricultural practices too have adversely affected the ground water resources. Habitants have also pointed out the presence of factories which excessively draw ground water. Due to scarcity of water there is no work in the agriculture and many migrate to nearby cities for earning.

However, the issue of availability of drinking water has not got the emphasis it should have from Government.

### **Government's efforts:**

Government is trying to overcome this problem by implementing Water conservation Programme in this district however the resources needed for covering all the blocks of the district are very huge.

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In rural areas where water conservation program has been implemented those areas have developed in such a way that the purchasing capacity of the poor has increased to the extent that they can afford the items which are not daily necessities.

To implement the water conservation program, it needs long-term planning, favorable topologically conditions and cooperation of the local people.

Year wise provision for water conservation programme is very essential but due to several loopholes in the existing programme the rate of success is not as anticipated.

### Rallis efforts:

In 2015 when there was acute scarcity of drinking water, drinking water was brought by railway wagons to the Latur city and nearby villages. Considering this situation Rallis India Limited has taken initiative to find out permanent solution to overcome this problem and started Jal Dhan project as a part of Corporate Social Responsibility in some of the villages.

Rallis India Limited convinced the concern villagers about the reality of the problem, the solution to overcome these issues and motivated the villagers to take the ownership of the project by becoming the implementing partner for Rallis.

Villagers have contributed minimum 10% of the amount via "Shraamdaan".

As per the topography, various methods were implemented like deepening and de-silting Nala, pond, existing water storage structures, constructing small check-dams, ponds so on and so forth.

The local village authorities and the Government authorities also appreciated the pioneering efforts of the Rallis India Limited and requested them to continue this activity in Latur Block of Latur District.

Rallis initiate work in Latur in 2015-16 with 3 villages, now Rallis has covered 34 villages from Latur district.



Seeing Rallis work, farmers, village authorities and local leaders were fully convinced that by minimum investment they can get the maximum returns. This message was sprayed in other villages also. Hence there was huge demand for Jal Dhan projects throughout district and also in the neighboring district i.e Beed. Since 2015 Rallis India Limited has covered 70 villages under its Jal dhan project from Maharashtra.

On this background impact assessment of the Jal Dhan project was conducted in below villages. These villages where selected on the basis of year of the work done.

The details of the villages and year of work is given in following table

Name of Village covered under Impact	Year of work
assessment	implemented
Sai	2015-16
Borgaon Bk	2013-10
Takali	2016-17
Murud Akola	2010 17
Jategaon	2017-18
Shirala	
Khandala	2018-19
Bopla	
Bhise wagholi	2019-20
Matephal	

### Methodology:

The information for said survey was collected from the farmers, youths and women groups and they were selected on the basis of simple random method.

For collecting accurate information various tools were used like:

- 1. For collecting information from various stakeholders, main method used was Interview with the help of questionnaire
- 2. Site visits, observation of the nearby Wells, observation on vegetation

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- 3. Focused group discussion with women and youths
- 4. Informal discussion to understand perception about the development of village due to Jal Dhan project among the village authorities.

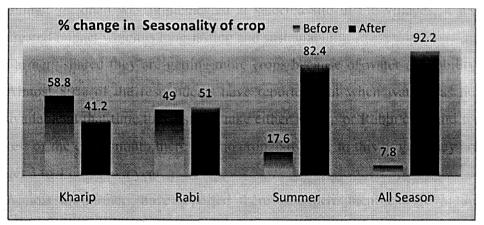
The broad observations are as follows-

### 1. Overall agricultural development

Farming is the main occupation followed by agri-allied businesses as secondary occupation. 90% of farmers in all villages reported that even though Jal dhan was implemented at selected site in the villages, it has created impact which is long-lasting and sustainable.

Farmers shared they are getting more crops because of water availability. Almost 80% of the respondents have reported that when water was not available at that time they used to take either Kharip or Rabbi crop and for rest of the eight-month there was no crop. Now due to this project they are get 3 to 4 crops in a year.

Almost all farmers have reported there is a permanent change in the cropping pattern. Every farmer is taking at least three crops and majorities have shifted towards Cash crops such as Soya, Sugarcane. This practice has resulted in increasing their income level.



# 2. Change in cropping pattern and cropping intensity

Almost 75% farmers have reported that even though they are getting the water for short duration, they are taking inter crop i.e. two crops in the same land and twice a year.

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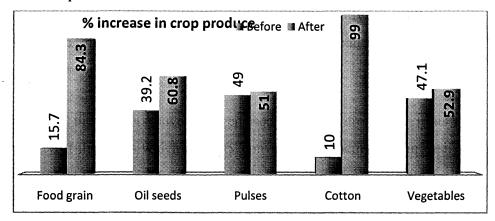


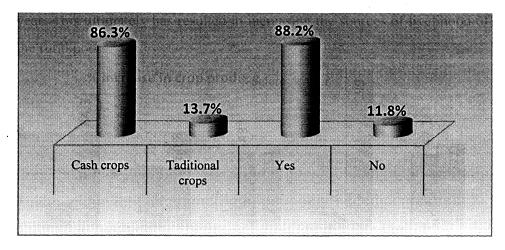
Earlier all farmers used to take only food grains however now the pattern has change, they are taking variety of crops from which they are getting maximum income.

About 60 to 70% of the respondents have reported that due to vegetable crop they have to go to city area quite frequently for selling these vegetables naturally they have good access of urban centers which are giving new ideas in agriculture.

Some of the farmers have also reported that they are taking trials on a variety of the crops which are very convenient to them and can easily get the market value.

Due to increase in crop production and year round crop, the daily wage earners i.e agri labourers are also getting engaged in farm work throughout year. This ultimately has resulted in increasing the sources of livelihood of the rural poor.





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# 3. Development of livestock and dairy business

With Jal dhan, water is available even in month of May, which is the peak month of summer and most of the farmers are taking the crop of various types of Fodder in this month too.

There is huge demand for fodder and it is generating income for both landless and landholder. Those who have agricultural land they are producing the Fodder as a crop and those who are of the landless they have rear the livestock which provides continuous source of money.

About 60% of the respondents have reported that due to this project livestock development took place in the village which ultimately resulted into the development of dairy business not only among the farmers but among the landless also.

About 65% of the respondents have reported that this situation has helped substantially for improving the economic condition especially those who were below poverty line.

In the Jal dhan water conservation site, on the bank of the nala there is a growth in natural vegetation. This vegetation is very useful for livestock especially goats. The families who are below poverty line are now rearing the goats as the secondary occupation from which they are getting good amount of income has been reported.

### 4. Development of horticulture

Availability of the water is the basic condition for horticulture development. Even though all farmers are not benefited by this project some of the farmers have planted various types of the saplings and now they have started getting the crop from mango, chiku, drumstick etc.

In all the villages almost 75% of the respondents have reported that there is an increase in horticulture plantation in villages.

Particularly since last five years farmers are giving preference to grow mango, guava and lemon. Due to this plantation, employment is created at

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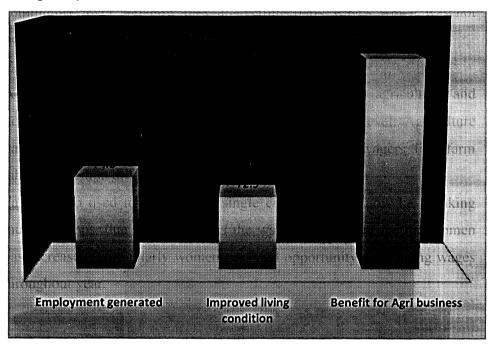


community level and now they are getting daily wages which was not possible before implementation of this project.

# 5. Employment generation at village level

Almost 90% of the respondents have reported that agriculture and horticulture has generated employment at community level. Agriculture has huge demand for the unskilled labourers, daily wagers like farm labourers, tempo drivers

Farmer who used to take only a single crop in a year now he is taking multiple crops, due to this process the wage employment for the women has increased. Particularly women get good opportunity for earning wages throughout year.



### 6. Economic development

About 85% of the respondents have reported that there is an increase in the cropping intensity, cropping diversity, vegetation and horticulture plantation, increased tendency of the farmers to take fodder as a summer crops, development of livestock and dairy business as a secondary occupation has helped substantially to the villagers.

Since last five years after implementation of the project almost all have their own two Wheeler's. In some families there are 2-3 two wheelers.

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After implementing this project at least 20 to 30 farmers have constructed their own house and have good amount of savings.

These are the clear-cut indications of the economic development.

About 80% of the respondents have reported that when there is a scarcity of the agricultural labourer that is an indication of BPL families have come above the BPL level.

About 80% of the respondents have reported that as they are getting regular income either from the dairy business or by selling various vegetables either at the community level or in nearby agricultural market.

Almost all farmers are the member of self-help group where they are saving substantial amount.

# 7. Use of technology in agriculture

Almost 90% of the respondents are aware that even though they have good amount of water available that water is not adequate to the crop during the summer season. Hence most of the farmers are using the drip irrigation which is saving the water.

Affordability to purchase a new technology itself is an indication that their knowledge has increase and economic condition has also improved.

About 60% to 70% respondents have reported that there are several applications related to agriculture, science and technology or agricultural market. Almost all farmers are using these applications to get the maximum profit from the agriculture

# 8. Improvement in land use pattern

The Indian agriculture is characterized by under utilisation of its strength and capacity to produce various crops. If land is available and water is not available it becomes very difficult to get the maximum production from the agriculture hence there must be water available for agriculture. These are the comments reported by 90% of the respondents in all villages.

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They have also reported there were lands which were not under cultivation is now brought under cultivation and have started getting income from this lands. Naturally there is an improvement in the land use pattern due to the availability of water through this project

## 9. Availability of drinking water

Acute water scarcity is one of the main characteristic of Latur Block.

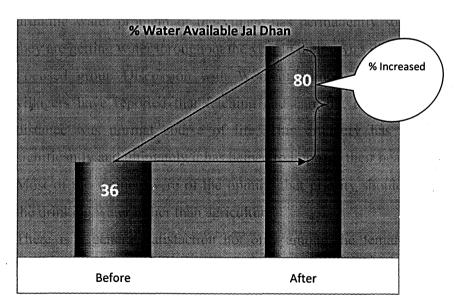
About 75% of the respondents have reported that due to Jal Dhan project rain water has been harvested and ground water has been recharge especially in downstream region, the percolation of water in the well is also at higher rate.

About 60% of the respondents have reported that due to this project the drinking water problem of the village has permanently solved and now they are getting water throughout the year in their own village.

<u>Focused group Discussion with Women:</u> Almost all women from all villagers have reported that fetching and carrying the water from long distance was normal course of life. This drudgery has been reduced significantly and ultimately it has helped to improve their health status.

Most of the women were of the opinion that priority should be given for the drinking water rather than agriculture.

There is a general satisfaction not only among the females but all the villagers due to the water availability at the village due to this project.



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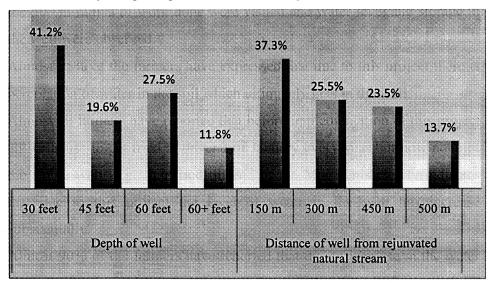
### 10. Impact on level of water in the well

While collecting the data from the various villages, the wells located within the 500 m radius of work done were visited and water level and storage in the well were observed.

Almost 95% of the farmers have expressed that due to this project there is percolation of water in the soil which ultimately gets in the well.

Almost all farmers have reported that before implementation of this project all wells use to get tried at the end of January every year but now none of the single well is getting tried till end of the May. This clearly indicates that due to this project the level of water in the well has increase substantially.

Almost 90% of the farmers have reported that due to increase in the water in the well they are getting more and more crops in all the season.



### 11. General atmosphere in the village

100% respondent has shared:

- 1. Due to the vegetation on the bank of Nala, crops in the summer, horticulture plantation, increase intensity of crops, increase level of water in the well has helped substantially to retain good amount of moisture in the soil
- 2. Due to this situation the average temperature during summer in the respective villages has been reduced drastically

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- 3. Due to this project large numbers of wild shrubs have grown which has control soil erosion naturally. This resulted in increase of fertility of soil, which resulted in increasing the production of the various crops in agriculture.
  - 4. This has resulted in improving the economic conditions of farmers.

Almost 95% of the respondents have reported that wild grass and shrubs also helped to reduce sedimentation, flooding and soil erosion problems in the lower parts of the project site.

### 12. Improvement in ecosystem

An ecosystem is a group of biotic communities of species interacting with one another and with their non-living environment exchanging energy and matter. Hence ecosystem includes physical environment as well as the biological component and the interaction between the two. Due to improvement in the employment conditions at community level there is a sound interaction between living and nonliving things. This has also helped to keep under control the natural disasters.

# 13. Development of biodiversity

Biodiversity includes the variety and variability of animals, plants and micro-organisms which are necessary to sustain key functions of any ecosystem, its structure and processes for, and in support of food production and food security. If favorable condition is not created the biodiversity development also doesn't takes place. Due to water natural stream surrounding agricultural land also gets favorable condition to develop the biodiversity.

Increase in flora and fauna, regeneration of natural vegetation, soil and water conservation has reduced the impact of natural Hazards. Most important aspect is 90% of the respondents have reported that they have good strength and capacity to mitigate the droughts and the problem of acute scarcity of water. This project has helped substantially to overcome the problem of drought.



### 14. Control of soil erosion

Almost 100% respondents have reported that there is an increase in flora and fauna which helps substantially to reduce the soil erosion and help to reduce the impact of natural hazards. Regeneration of natural vegetation helped in several ways to generate income, to develop animal husbandry, to get employment opportunities to the landless labourers, to engage all the family members in agriculture throughout year, getting various crops and having market access helped to improve not only the economic condition but the social status of the family in the village.

### 15. General impact of community initiative

Almost 100% respondent reported that there are several aspects at community level which can be undertaken collectively for their own development. Rallis project is one of such project were at community level all villagers came together to implement the project and also made their contribution in this project because this project is going to solve their problem of water for agriculture and drinking. Hence now community is aware about the problems they are facing and there is several dialogue and discussions among them what way they can improve their own conditions.

# 16. Impact on arresting migration

There are several aspects due to which migration is arrested. About 90% of the respondents have reported that as the water is made available at community level during the summer season there is no need to go in others village or in urban areas for the livelihood resources. At community level almost all landless labourers are getting the employment opportunities throughout the year hence they are not migrating at anywhere to earn their livelihood resources. Use of new technology is also helping in improving the economic condition. When the economic condition of the community is improved there is a no migration therefore this project has substantially help in arresting migration.