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Kalasa –Banduri Nala Project from the Perspective of Yamanur Villagers of Navalagund Taluk of Dharwad District, Karnataka, India

V B Saviramath¹, Sukumar A Kokatnur²

¹ Associate Professor, Department of Geography, Karnatak Science College, Dharwad

² Research Scholar, Department of Studies in Geography, Karnatak University, Dharwad

Abstract

Water is most unevenly distributed natural resources on the earth surface. Many a time's disputes arise between states and counties when they became unable to manage these resources properly. None of the rivers follow political boundaries and many of them have their courses in two or three states. All states which share the water of a river want to utilise maximum extent. This is the main reason for conflict for water between states. Erratic nature of rainfall and frequent drought on the hand and increasing population, rapid urbanisation on the other hand enhancing the severity of problem. Karnataka state is fighting for its share in water of river which has their courses in adjacent states. Kalasa-Banduri water dispute one among such conflict. This project was undertaken by the government of Karnataka to improve drinking water supply to districts of Belagavi, Dharwad, Gadag. Goa state is opposing Karnataka's plan to divert 7 TMC water from Mahadayi River to the Malaprabha river basin. As the interim verdict of Magadaya water tribunal (2015) was against the interests of Karnataka various organisations have called for protest. As political leaders interfered for their selfish interest, people of Yamanur village were harassed by police through they have not committed any kind of crime. Thus, the present study makes an effort to analyse the causes and effects of the horrific incident and view Kalasa-Banduri project from the perspective of Yamanur villagers.

Keywords: KalasaBanduri; Dispute; Interim verdict; Protest; Harassed

Introduction

As water is used for multi-purposes viz. drinking, cleanliness agriculture and industries, its shortage or absence can lead to disputes. Its unequal distribution among states can disturb the federal

relations. Government of India formed rules on June 30, 1959 to settle interstate water disputes. According to the Interstate Water Dispute Act, 1968 the Central Government has been given the responsibility of regulation and development of interstate river valleys.

“Many of these interstate water disputes have been settled on the basis of equitable apportionment which is the universally accepted principle” (Sukhwal, 1987). But still there are some disputes whose final solution, acceptable to all parties, has not yet been worked out. A river doesn't follow political limits. Most of the Indian rivers have their courses in two or more states. Thus, the states which have a common river want to utilize the water to the fullest extent. Therefore, conflict for the water arises between the states. In addition to this, increasing variability of rainfall and frequent draughts is common problem to all states which further increasing the severity of the issue. Increasing population and rapid urbanisation is also contributing to the intensity of the problem. Above all politicians are mishandling the disputes for their political benefits.

Kalasa-Banduri Water Dispute

It was in the year 1978, Karnataka state thought of utilizing the Mahadyi river water which is draining to the Arabian Sea. R. Gundurao who was chief minister then formed a committee under the leadership of S.R. Bommai for preparing a report regarding this. The committee submitted its report in 1980 and recommended the diversion of Mahadaya river. The state government accepted the plan in the year 1988. The Kalasa-Banduri Nala project is undertaken by the Government of Karnataka to improve drinking water supply to the Districts of Belagavi, Dharwad Gadag. It involves building across Kalasa Banduri, two tributaries of the Mahadaya river to divert 7.56 TMC of water to the Malaprabha river which supplies the drinking water needs of the said three districts.

Mahadaya (Mondovi in Goa), is west-flowing river in the Western Ghats, originates in Deagaon village, Belagavi district of Karnataka. The river flows about 35 km in Karnataka then flows through Maharashtra and Goa (about 82km) before meeting the Arabian Sea. Approximately 200 tmc. Feet of its water flows into the Arabian Sea without being used for anything now. However, Goa opposed the project, saying it will affect environment and biodiversity. In 2010, following Goa's plea the Mahadaya River water tribunal was formed. The Mahadaya Water Tribunal has to decide the sharing of this river's waters between Karnataka and Goa.

The Tribunal ruled that, allowing water to be transferred for the project would be ecologically damaging the natural equilibrium of Mahadaya River. Tribunal raised concern that the Karnataka government had also not obtained 'environmental wildlife clearances' to execute the project. As a result, the small town of Navalagund of Dharwad district in Karnataka with a population of 25,000 has been the epicenter of farmers' protest demanding water from the river, Mahadaya. On July 30, 2017, the state of Karnataka woke up to the shocking news of police brutality against farmers, including women and children, who had gathered to demand their share of water in non-violent mode.

For decades, Goa and Karnataka have been dependent on each other for their economic and social growth. The Mahadaya river issue spoiled the cordial relationship between the two states. In the last few years, these states have been locking horns over the sharing of water from the Mahadaya River. The long-pending water-sharing dispute has now taken a political twist with all the parties getting involved in the blame game. But the real sufferers are the poor farmers of North Karnataka and the sensitive Western Ghats.

Objectives

The present study is mainly based on the following objectives. To know the historical background of Kalasa-Banduri project. To highlight the protest of Yamanur villagers for Kalasa-Banduri water. To suggest some measures for solving the dispute of Kalasa-Banduri water and hardship of Yamanur villagers.

Study Area

Navalagund taluk is the largest taluk in Dharwad district with 1080 sq. km. area located in north-eastern part of the district. The taluk is extended between 15° 21' North latitudes to 15° 42' North 75° 6' East longitude to 75° 33' east. Average elevation of the taluk is 623 m. It ranks second in respect of population size with 176648 persons according to 2011 census. As far as rural urban population is concerned 27.12% of the total population are living in urban areas while 72.88% people are living in rural area of the taluk. As far as density of population is concerned, Navalagund taluk has recorded the lowest density of 163 persons per sq.km. Which is far below compared to district's average of 377 person per sq. km. Literacy rate of the taluk is 63.9% which is lower than the district average of 71.60%. 77.2% of the males of the taluk are literates while literacy rate of women is only 50%. It is very low compared to district's female literacy i.e 61.90%. Number of cultivators in the rural area of taluk is 33886 while in urban area it is 5164. Number of agricultural labourers in rural area is 33199 only 9222 labourers are engaged in agriculture in urban area of the taluk. Navalagund receives the lowest amount of rainfall i.e 643 mm in the district (786mm) as it is located in semi-arid area of the state.

Yamanur village is one of small villages in Navalagundtaluk of Dharwad District. As per 2009 statistics, Yamanur is the gram panchayat of Yamanur village. Total geographical area of village is 1546.54 hectares. According to 2011 census Yamanur has a total population of 2211. There are about 441 houses in Yamanur village. Total population of the village is 2318. There are 1100 men 1068 women, Population density of the village is less than the taluk average. Out of the total area 1441.9 hectors is under cultivation 629 hectors area is irrigated by canal. Jowar, wheat, gram etc. are the major crops grown in the village.

LOCATION OF YAMANUR VILLAGE IN DHARWAD DISTRICT

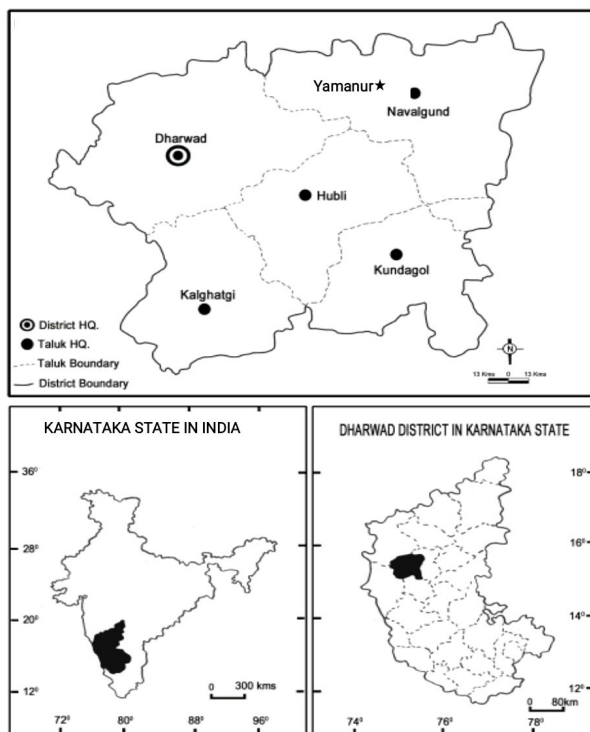


Fig. 1. Location map of the study area.

Data Base and Methodology

The study is mainly based on both primary and secondary sources of data. Primary data has been collected through house hold survey with the help of questionnaire based interviews. Totally 64 households from the Yamanur Village have been surveyed. The secondary data was collected from village Panchayat, Rural Development and Panchayat Raj Dept. Simple techniques like percentages are used to analyse the collected data Graph pie diagrams have been used for representing the data.

Results and Discussions

Diversion of Mahadayi water to Malaprabha dam

River Malaprabha rises in the Western Ghats at an altitude of 792m, which is located at 16km west of Jamboti in Belagavi district of Karnataka State. The river first flows in an easterly direction and joins the Krishna at KudalaSangama about 304 km. Away from its source. Near Saundatti it flows through a deep gorge known as Naviltheertha. Its principal tributaries are Bennihalla, Hirehalla, Tasnadi etc. All these

drain in an area of relatively low rainfall. The total catchment area of the river and its tributaries lie in Karnataka state. A dam has been constructed to the river at Naviltheertha to form reservoir. This river drains into Krishna River between AlamattiNarayanpur dams. Although, this dam was constructed to provide water to BelagaviDharwad district, it was hardly filled by the rain. Thus, the government of Karnataka thought about the diversion of Mahadayi river water to this dam.

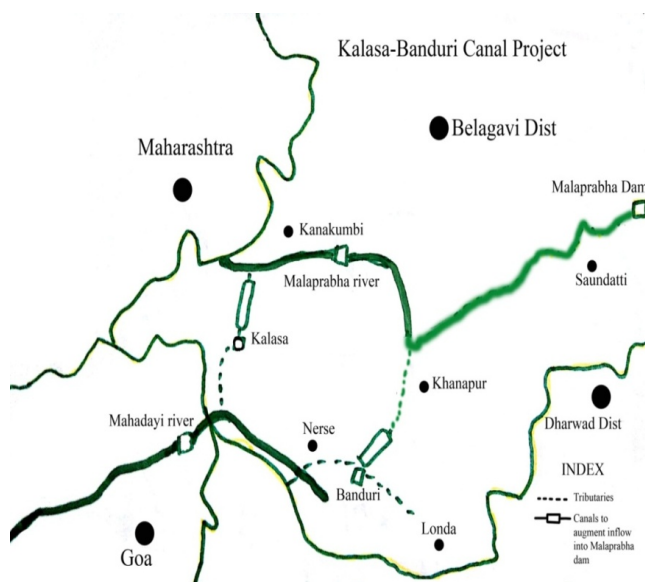


Fig. 2. Kalasa- Banduri Canal Project.

Yamnur Villagers' Protest for Water

Mahadayi Water Dispute Tribunal was set up in 2010 to look into the issue. The recent flare up in North Karnataka was triggered by the tribunal's rejection of Karnataka's request to divert the water. People of Navalgund taluk protested for months together for water but in vain. Outraged by the interim order of the tribunal people of Yamanur village expressed their anger by destroying the government offices furniture. This took an ugly turn when police entered the village dragged the innocent villagers assaulted them. Even women children were not spared. Most of the villagers are still suffering from the horrible attack. They have been continuing the protest though they do not have a clear idea about the proper way to protest for the water.

Goa's nature concerns

On the other hand, Goa is backed by a strong group of ecologists who have come under the banner "MahadayiBachovAndolan" been opposing any kind of diversion of the river. It is assumed that about 43% of drinking water needs of Goa are met by the Mahadayi River. Any change in the river system of

Mahadayi or Kalasa, which is the major tributary of the river, will affect the drinking water needs of Goa state.

Goa's stand is that, apart from drinking irrigation, the river plays a big role in the fishing industry. "The construction of a dam upstream will change the salinity of the river near its estuary. Even minor variations in the salinity will affect the unique aquatic bio-diversity." The Goa government has also pointed out that the economy of Goa depends on the tourism water scarcity will affect the tourism adversely. According to the government, the project will also affect the wildlife sanctuary of Bhimgad, where over 700 hectares of forest will be submerged about 60,000 trees destroyed. Goa's ministers are frequently visiting the disputed area i.e the river basin without taking the permission of Karnataka state government making false statements as Karnataka has continued the construction of dams violating the tribunal's order.

Present Scenario of the river basin

The construction work of the barrages at Kalasa-Banduri site for water diversion has affected the catchment area of river Malaprabha in Khanapur taluk. It has been reported that the wells around the birthplace of the Malaprabha River are going dry. This can also be attributed to the prolonged drought in the region which has aggravated the farmers' agitation. For the last one year, four districts of north Karnataka – Dharwad, Gadag, Belagavi/Haveri – have been affected by repeated strikes called by the agitating farmers pro-Kannada activist groups. Besides huge economic loss, the protests help only to frame a wrong picture about Karnataka before the Tribunal, feel the experts in the region.

Yamanur Villagers' Perspective

As Yamanur is located in semi-arid zone of the Deccan plateau, drought is common phenomenon here. Average rain fall of the taluk is 63 cm per year which is not sufficient for growing multiple crops. Variability of the rainfall is one more obstacle for the farmers. Not only for cultivation, do people of the village not have enough water either for domestic works or for drinking. Although, government records say that length of the canal found in the village is 16 km. Most of the farmers do not have any irrigation facility to their farms.

Acute shortage of water in the village is not a recent feature, since many years villagers are suffering from the problem. In such situation, a little knowledge about the Kalasa-Banduri project motivated them to agitate for the execution of the project. People of Navalagund taluk have been protesting for the drinking water more than 700 days. None of the political leaders are showing real concern towards this. With this background, our study made an effort to know the present status of their agitation.

Although, the whole taluk was involved in the protest for water it was people of Yamanur village only suffered a lot due to reckless beating of police. Many villagers are not recovered even after three years. Thus, we made an effort to study causes effects of their aggravated protest for execution of Kalasa-Banduri project. For this purpose, 64 respondents were randomly selected for questionnaire based survey. It was very difficult to get the information about the police attack as they were not able to come out of that fear even today.

Sex composition of the respondents

Majority of the respondents are males of total 64 respondents, 79.61% are males; whereas 20.31% of respondents are females. It was really touching that nobody in the village wanted to talk with us freely. They were not even allowing their women to tell anything. Thus, we could meet only 13 women of the village though we wanted to know experience of more women during that tragic event. (Table 1 Figure 3)

Table 1. Sex composition of the respondents

	Male	Female	Total
Number of respondents	51	13	64
Percentage	79.66%	20.31%	100%

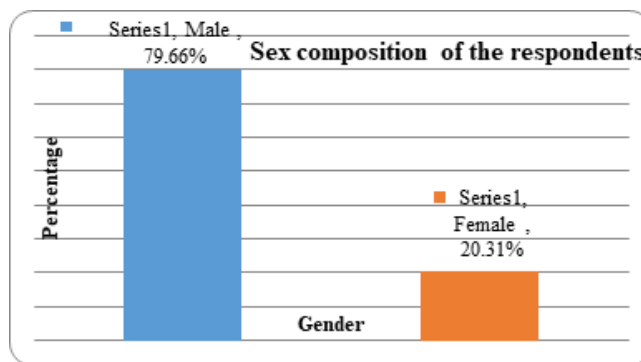


Fig. 3. Sex composition of the respondents.

Age composition of the respondents

As far as age groups of the respondents are concerned, 34.57% are below the age of 22 Years; 28.12% of respondents are aged between 50 and 60 years; 17.16% respondents are aged between 30 and 40 Years; 10.45% are in the age group of 40 to 50 Years 4.57% are above 60 years older. Majority of the respondents are below 30 years age. Thus, it is clear from the table that senior people of the village were not ready to cooperate with us. Because of this we had to depend on the information given by youngsters who were below 30 years. (Table 2 and Figure 4)

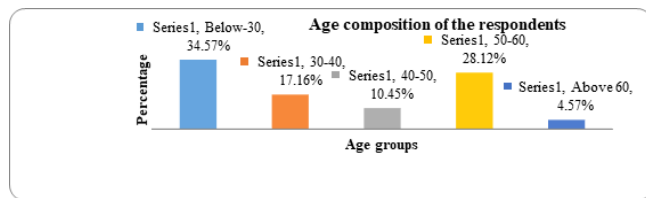


Fig. 4. Age composition of the respondents.

Table 2. Age composition of the respondents.

	Below-30	30-40	40-50	50-60	Above 60	Total
Number of respondents	22	11	07	18	06	64
Percentage	34.57%	17.16%	10.45%	28.12%	4.57%	100%

Respondent's level of education

The level of education among the 64 respondents is measured in 6 levels viz. illiterate, primary, high school, PUC, degree, any other. In the study area majority respondents have went up to PUC 18(28.12%) next to this 15(23.45%) have High school level education; 12 (18.75%) of respondents are illiterates; 11(17.16%) of respondents are educated up to primary level; 4(6.25%) of respondents are having higher education or degree level education 4(6.25%) of respondents are have completed other degrees like ITI or job oriented courses. (Table 3 and Figure 5).

Table 3. Respondents' level of education.

	Illiterate	Primary	High School	PUC	Degree	Any others	Total
Number of respondents	12	11	15	18	04	04	64
Percentage	18.75%	17.16%	23.45%	28.12%	6.25%	6.25%	100%

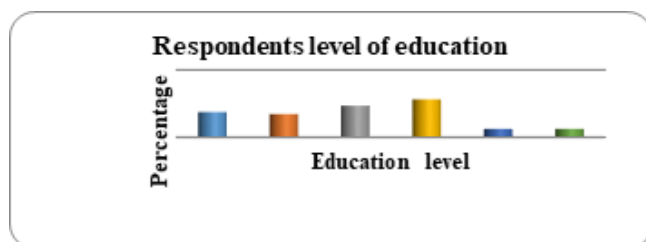


Fig. 5. Respondents level of education.

Occupation of the respondents

According to the table majority of respondents are farmers. Of all 64 respondents 46(71.87%) are farmers; 07(10.93%) working in others job; 5(7.81%) are working in service sectors; 3(4.68%) are doing Allied activities; 3(4.68%) are industrial laborers. Thus, most of the villagers are engaged in agriculture. However, very few farmers have irrigation facility their farms. This is the main reason villagers are protesting for the Mahadayi River. (Table 4 and Figure 6)

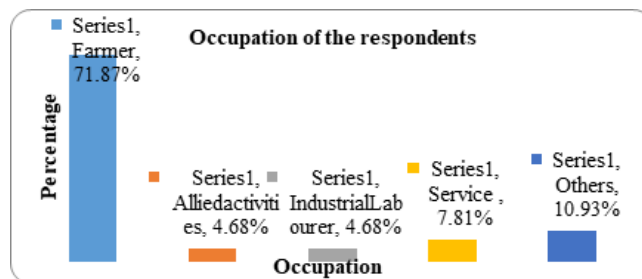


Fig. 6. Occupation of the respondents.

Table 4. Occupation of the respondents.

	Farmer	Allied activities	Industrial Labourer	Service	Others	Total
Number of respondents	46	3	3	5	7	64
Percentage	71.87%	4.68%	4.68%	7.81%	10.93%	100%

Level of irrigation in the village

In the study area majority of respondents do not have irrigation facilities to their farm. About 63(98.43%) of people do not have any irrigation facilities to their farms. Only negligible number i.e 1(1.56%) of respondents have irrigation facilities to the farms. Although, Rural development Panchayat raj Dept. records show that length of irrigation canal in the village is 16km. Thus, the village is completely dependent on rainfall for agriculture. Bennihalla, the major water body of the village is hardly filled with water. This is known for flash floods also. (Table 5 and Figure 7). We also made an effort to know about the frequency of drinking water supply in the village. Although, most of them told that they are getting water twice in a week, it was known fact that supplied water is not at all sufficient for either drinking or for domestic works. Frequent draughts meagre amount of rainfall aggravated the problem of drinking water which in turn forced the villagers to sit for protest with hope of getting water.

Table 5. Level of irrigation in the village.

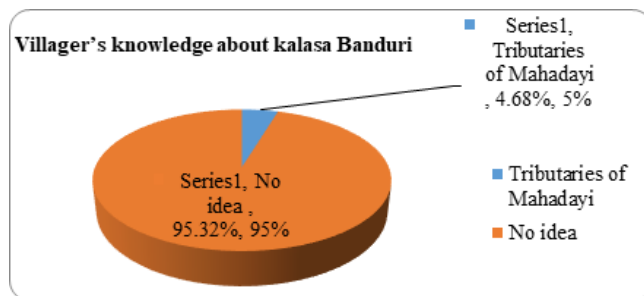
	Yes	No	Total
Number of respondents	1	63	64
Percentage	1.56%	98.43%	100%

Villager's knowledge about Kalasa-Banduri

According to the table in Yamanur village, majority of the people don't have any idea about the Kalasa-Banduri project. Of all 64 respondents 61 (95.35%) of people are having no idea about the project. However, the villagers are blindly protesting for the water by following their leaders. Only 3 (4.68%) of people are know about the tributaries of Mahadayi river. (Table 6 and Figure 8)

Table 6. Villager's knowledge about Kalasa-Banduri

	Tributaries of Mahadayi	No idea	Total
Number of respondents	3	61	64
Percentage	4.68%	95.32%	100%

**Fig. 7.** Villager's knowledge about Kalasa Banduri.

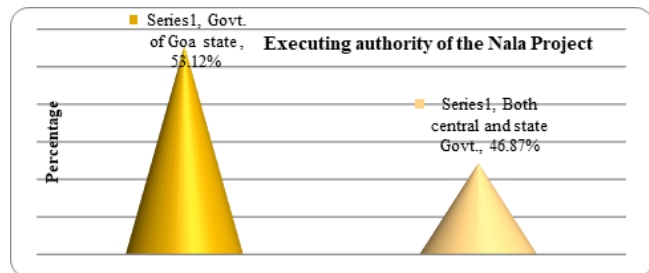
Executing authority of the Nala Project

34 (53.12%) respondents are telling that Government of Goa is the responsible for the delay the Kalasa-Banduri Project. Out of 64 respondents 30 (46.87%) of the respondents are arguing that both central State Governments are responsible for delay in the project. (Table 9 and Figure 10) The table makes it clear that nobody in the village have proper idea about who is responsible for the delay in the execution of the project.

Along with we made an effort to know whether they are sure about getting water if the proposed project is being executed. It is very queer to hear that none of the villagers are sure that they will get water from the project. Thus, the villagers without knowing anything about the government system or about the project are blindly protesting for mirage like water from the Kalasa- BanduriNalaProject (Table 7 and Figure 8)

Table 7. Executing authority of the Nala Project.

	Govt. of Goa state	Both central and state Govt.	Total
Number of respondents	34	30	64
Percentage	53.12%	46.87%	100%

**Fig. 8.** Executing authority of the Nala project.

Person who would bring water to village

According to table people are not consider any leader who fight for mahadayi river issue. About 63 (98.44%) of respondents are consider no leader is fighting for Mahadayi River. Only 01 (1.56%) respondent is considered that local MLAs are fighting for Mahadayi River. (Table 8)

Table 8. Person who would bring water to village

	Local MLA	None of these	Total
Number of respondents	01	63	64
Percentage	1.56%	98.44%	100%

Victim of police attack

How that most of the respondents have faced the police attack. 40 (62.05%) of respondents are being attacked by police at the time of Mahadayi strike. About 24 (34.5%) of respondents are not being attacked by the police. However, most of the villagers were affected directly or indirectly by the unlucky incident. (Table 9 and Figure 9)

Table 9. Victim of police attack

	Yes	No	Total
Number of respondents	40	24	64
Percentage	62.05%	37.05%	100%

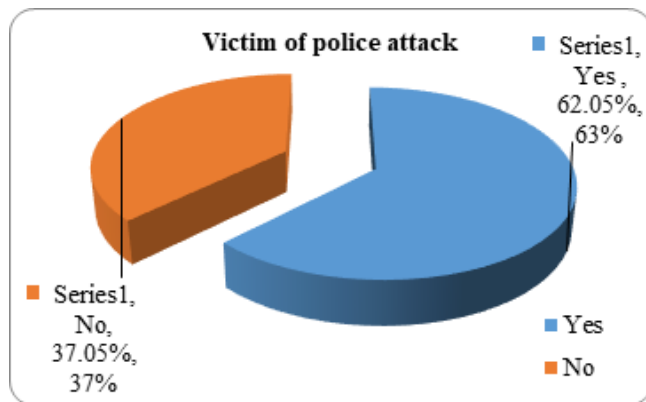


Fig. 9. Victim of police attack.

Compensation for ailments

In this table, out of 64 respondents majority of the people i.e. 54(84.37%) of did not get any compensation from Govt. Only 10(15.62%) of respondents told that they got the compensation by the Govt. but these people are in severe condition. They were paid only one hundred rupee for one ailment. Thus, compensation was not enough for the treatment. People are still suffering from the fractures etc. They are not able resume to their routine work. Neither did they get water nor the normal life from the protest for which they have spent more than two years by disturbing their bread winning work. (Table 10 and Figure 10).

Table 10. Compensation for ailments

	Yes	No	Total
Number of respondents	10	54	64
Percentage	15.62%	84.37%	100%

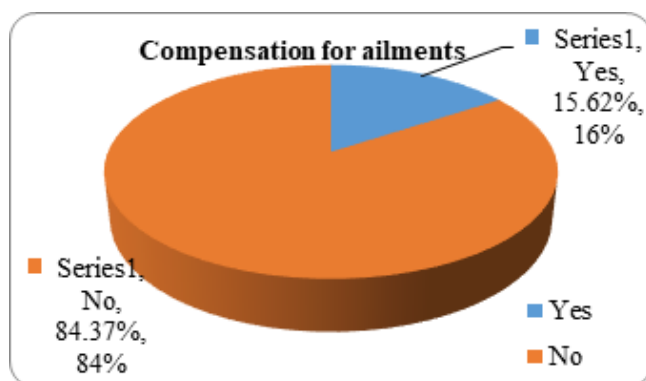


Fig. 10. Compensation for ailments.

Even after suffering a lot by the police attack, people of Yamanur village are still thinking to aggravate their protest for water. All the 64 respondents confirmed that they continue

their agitation for Mahadayi river water. This statement makes it clear that they are very innocent people. Therefore, they believe that by protesting they could bring the water. Even women of the village have the same notion. They are ready to sit for protest though they know that their house hold work will be disturbed completely by this persistence.

Conclusion and Suggestions

Yamanur village is facing an acute shortage of water. Since many years villagers are suffering from the problem. In such situation, a little knowledge about the Kalasa-Banduri project motivated them to agitate for the execution of the project. People of Navalagund taluk have been protesting for the drinking water more than 700 days but in vain. Although, the whole taluk was involved in the protest for water it was people of Yamanur village only suffered a lot due to reckless beating of police. Following conclusions have been made from the present study.

With all government's effort to improve the level of literacy, 12% of the Yamanur village are still illiterates hardly 6.25% of them have completed the degree level education. As Yamanur village is typical Indian village, 71.87% of villagers are engaged in agricultural activities. Although, government records say that 16 km irrigation canal is found in Yamanur village only 1.56% of the farmers are having irrigation facility to their farms. The villagers are not sure that they will get the river water if the project is being executed. Thus, they are blindly protesting by following their leaders. People of Yamanur do not have an idea about who is the executing authority of the project. As far as the project's execution is concerned, Villagers have no faith in local MLA and MP. Many villagers were being attacked by police in the tragic incident that took place in the year 2015 though they did not commit any crime. Although, government announced the compensation, most of the victims who were beaten by the police did not get any compensation for the treatment. Even today after having gone through such a horrible experience, people of Yamanur village want intensify the protest.

After analysing the condition of the village by collecting primary data the present study makes an attempt to give some suggestions as follows. There is an urgent need to create awareness among the villagers about the limitation of their protests. They must be understood that simply by protesting, making strikes and destroying the public properties their goal cannot be achieved. The villagers must be convinced so that they should avoid following the village leaders blindly. Villagers must be trained in such a way that they should give up their persistence about the agitation. Political leaders should convince the government of Goa as well as the central government for amicable solving the issue amicably. Opposite party leaders also should show real concern for the people and present the matter to the prime minister effectively. Making false statements giving fake assurance by political

leaders must be strictly prohibited. The leaders who instigated them for the strike must make serious effort to get proper compensation for victims of police attack.

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