• ***A summary document (up to 2000 words) reviewing the work and achievements of the Nominee, demonstrating the reasons why the Nominee's accomplishments should be Considered as an outstanding contribution to the field of cooperation and sound management in the development and use of water resources.***

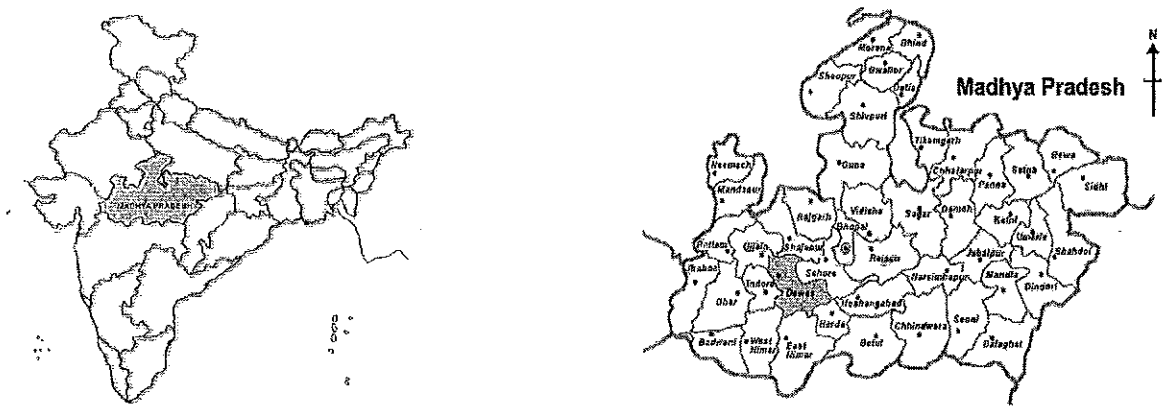
India has agriculture based economy where more than 65 pc people are dependent on Agriculture. The country is blessed that it receives 1100 mm of average annual rainfall (Rainy days are only 40) which is more than sufficient to meet the existing need of diverse cropping pattern followed in the country. Despite this, less than 2/5th of its cultivable area is under irrigation and cropping intensity is hardly 140 pc. Around 80 pc irrigation is from Ground water which is depleting very fast and at many places the ground water has totally dried up. During the last 60 years of development in modern India only 6 percent area has come under irrigation through dam and canal system which has on the other hand lead to 25 percent area of the irrigation potential created under submergence and its water efficiency is only 20 to 25 percent. Overall the potential of River Valley project is hardly 25-30 percent. Another prominent source of irrigation is tube well which has resulted into near depletion of ground water which has gone down to the level of up to 1500 ft.

Water is one of the key elements of inclusive growth. It is one of the most important inputs essential for the production of food. The Green Revolution/ agricultural progress of the country and the related prosperity could be largely attributed to this single input more than anything else. Realizing the fact the Governments have invested in large irrigation schemes which however were poorly managed and failed to deliver the envisaged results. The big and small farmers across the country also have invested according to their knowledge and resources. But unfortunately most of the efforts (bore well), instead of harvesting rain water, go deep down depleting the precious ground water. Presently we are surviving at the cost of next generations as the ground water which was stored for many centuries is insensibly drained out for irrigation through tube wells leading to unsustainable exploitation. This exploitation has resulted into the food insecurity and the main sufferers are poorest of the poor specially women. We have to stop this and pay back the water for the survival of our future generations.

The" Bhagirath Krishak Abhiyan"*[1] in Dewas district*[2] of Madhya Pradesh province of India brings in a new dawn in the history of modern India by way of bringing in a movement to restore rainwater by creating more than fifteen thousand indigenous Irrigation Ponds in the Province built by the people using own resources having storage capacity of 180 million cum.

The western part of Madhya Pradesh (M.P.) province, especially the Malwa region has been suffering from severe water crisis since the eighties. The insufficient/ inefficient management of surface water for irrigation has led to high exploitation of ground water. In the absence of any significant efforts having been made in recharge of groundwater, the areas are changing fast into grey and dark areas projecting serious challenges not only to the agro livelihoods of the region but also for the food security, Bio diversity, climate change, Soil conservation and basic domestic needs putting food security and the development of future generations at risk.

Bhagirath Krishak Abhiyan"*[1]: Name of the Movement for water conservation.
Dewas district*[2]: District of Madhya Pradesh Province having 100 to 150 villages



Map: Showing location of Madhya Pradesh Province and District Dewas

The immediate cause could be attributed to the large and medium farmers trying to bore deeper each year to irrigate and in turn further depleting the ground water level. The situation in Dewas district of MP was pathetic with even noted cases of transportation of drinking water by trains. So when Mr. Umakant Umrao, an Administrative officer and Engineer by education (hailing from a rural farming background) was posted as District Administrator in Dewas district in 2006. He was very apprehensive of finding a sustainable solution to the problem. He was aware that small "watershed based approach" model having economically viable solution through a stakeholder management process is the only envisaged solution for food security and sustainable development catering to inclusive growth as large scale irrigation projects had never been able to deliver more than 40 percent of the projected results and even if river valley potential is exploited it can address only 30 pc of irrigation requirements.

The district administrator in his frequent visits to rural area explored location specific intervention strategies, until one day he came upon a farmer who agreed to do insitu water harvesting by digging a medium size pond (talaab*[3]) in part of his farm and irrigate the remaining land. Implementing the first case was extremely difficult without any enabling environment. However once the talaab was completed, water harvested and the resultant high agricultural production and profit in the first year was sufficient to wipeout the investment. The decentralized water conservation cum harvesting structures as a viable irrigation system was established.

The equation was simple that a pond based irrigation management system (investment in water) means high profit, low risk, high replicability and higher asset value and more livelihood options. The ground water recharge, increase in sustainability of natural resources, low energy consumption and bio-diversity had a supplemental impact on the ecosystem.

The biggest challenge was to develop technical models for customized solution which were economically viable for individual to invest / to construct. Keeping in the mind the soil, geological condition, terrain land holding, rainfall and location of farmer crop practices etc. The other challenge was convincing the farmers, arranging for the financial resources, arranging for the infra support, user friendly technology and finally mobilising

talaab*[3]: Water conservation cum Harvesting Structures.

the chronically underperforming delivery mechanisms (the bank and other government development extension systems) to actively support.

A strong convincing case of profit model with early break even was projected in between the farmers by the well motivated team of experts who were personally trained by Mr Umarao and handed with simple IEC (Information Education and Communication) material prepared in local dialect designed with specific inputs. Mr Umarao himself gave the leadership and presented himself as biggest motivator because this was a profit based business model for water conservation cum harvesting providing sustainable solution for irrigation so the momentum picked up when farmers began to see successful models.

The Talaab was called 'Rewa sagar'* and the Farmer 'Bhagirath Krishak' (Bhagirath was a mythological king who could bring the sacred Ganga (Holy river of India) for quenching the thirst of the next generations to bring in the special appeal to the rural masses. The bankers, Government officials and local body members, individual farmer got motivated by the young district Administrator's personal value system of commitment to the cause, passion of results and integrity.

Though lot of emotional quotient was added the process was very strategic. Instead of preaching for sacrificing personal economic gain for the larger national or social benefit, it was a challenge to change the approach and earn profit by conserving water. The programme envisaged an extremely sustainable model with a 'win-win situation' for all stakeholders. Over the period of a year each farmer became a motivator himself and soon several hundreds of role models were created, who took vow to cease bore wells and helped extend 'Rewa sagars' beyond their boundaries.

The results are astounding

There are now more than six thousand Irrigation Ponds in Dewas district alone, and there are around 15000 in province and the number is ever increasing there storage capacity is 180 million cum. The impact can be calculated from the fact that total of all irrigation efforts by the Government/ Individual since independence brought only 3% cultivable area under assured irrigation in 50 years whereas this movement increased such percentage by 12% (50000 hectares) in 5 years. The effort has won 5 National Awards for augmenting ground & surface water.

The Water level which had gone down to 500 to 600 ft in the area has come up significantly and in many villages ground water level is hardly 10-15 feet and It has let to regenuvate more than 20000 wells and tube-wells which are either dried up or not having sufficient water.. This has benefited the poor and the women most. These decentralized surface storage structures have supported the other systems like wells and bore wells and thereby completely mitigating drought in the area in cases of failure of the monsoon (rains).

The practice of digging open wells by small and marginal farmers due to low water level was discontinued long back in the region. Open wells are now back and around 1000 wells have been constructed under scheme in 2007. The small and marginal farmers

Rewa sagar'*4: Name of Water harvesting structures named on Holy river of India "Rewa"

have got back their due and the women has not to travel far to fetch the water for drinking.

Agricultural intensity and productivity and production has increased many times. Entire Mandi (APMC*[5]) system has been relocated to facilitate the marketing of Agriculture produce.

Agriculture has got diversified and farming systems have improved and farmers have shifted from Soybeans based mono crop in kharif, to Rabi and zaid (multi) cropping.
[Kharif (Rainy season crop):- Ist Crop : Rabi (Winter season crop: IInd Crop and Zaid (Summer season crop: IIIrd Crop}

Multiple livelihoods including dairy and fisheries have evolved and the employment days and minimum wages have gone up for the individuals.

There is a reduced requirement of fertilizer per unit of agricultural land because of better soil conservation ensured by this model. Water user efficiency in pond irrigation is much more as compared to other types of irrigation.

Increased availability of vegetables, fish, milk and increased production of food grains has resulted in perceptible change in nutritional levels.

In some cases entire villages have been covered with pond irrigation. The economy has transformed with huge increase in agricultural productivity, multiple livelihood options, and increase in agricultural productivity and number of employment days.
Improved biomass has bettered the quality of livelihood for farming families. The women who earlier suffered from the drudgery of fetching water could now actually contribute to the family's growth. The enrolment ratio in schools has been much better. More over "Pucca" (Cement and Concrete) houses have replaced the old "kutcha" (Thatched) structures.

The soil conservation efforts have resulted almost hundred percent controls on farm land erosion. The biggest gain, however, was of the enormous wealth added to the Biodiversity with flocks of deer, blackbuck, and several species of birds, insects, reptiles and flora showing presence. The microclimate has changed arresting the extremities of climate.

The movement is self replicable and has spread into several districts of Madhya Pradesh province. More than twenty five thousands of visitors from across the country and abroad have come to witness the success of Bhagirath Krishak movement, and they include farmers, women groups, government officials, students, media personnel, policy makers, development planners and activists.

Here is a solution, a movement, an approach which probably makes the former Indian President's Vision 2020 and the Millennium Development Goals of the UN a reality.

APMC*[5]: Agriculture Production Marketing Centre

The Context

Water is perhaps the most important resource available on earth and it is such a key resource that it has a vast influence on the Agriculture, domestic, industrial as well as economic sector of India. Its key importance in sustaining human race cannot be denied. It is the most basic human need and a valuable national asset. Efficient development and optimum utilization of water resources, therefore is of great significance to the over all development of country. Water resource management in India is going to be vitally important to sustain the needs of more than 1.2 billion population of India. In India more than 66 pc people depends on Agriculture and allied. Though India has only 40 pc culturable area under irrigation but because of dependency on ground water for irrigation (80 pc irrigation is by ground water) a substantial geographical area has become either grey or dark. Over exploitation of ground has led to loss in productivity and production and in certain cases the complete crop failure. This has resulted into many thousand farmer suicide in India. On one hand Agriculture is becoming uneconomical and on another hand water situation has become unsustainable. Having limited resources at Government level and technical – economical limitation of Dam-Canal System there was a need to have a different model than prevailing models which is decentralized water conservation cum harvesting structure which are economically viable, technically simple and easy adoptable customized models. These customized models have less commissioning period, less submergence area, low cost, leads to conjunctive use.

Hence development planners had proposed that small watershed based approach through a stakeholder management process is one of the sustainable envisaged solution. But most of such initiatives targeting the resource less and with community management models take their own time to deliver and have ownership, distribution and long term maintenance issues. So we need to have a individual based economically viable technically simple sustainable solution working on watershed based approach.

The need

The Dewas district of Madhya Pradesh is located on the Central Indian Malwa Plateau. The erratic monsoon (rains) in successive years and over exploitation of ground water had created serious water imbalances since the eighties. Moreover the zeal to get more agricultural production through high exploitation of ground water had grave consequences. In the absence of any significant efforts having been made in recharge of groundwater, the area was changing fast into grey and dark areas projecting serious challenges not only to the agro based livelihoods of the region but also for the basic domestic needs. There were cases of drinking water being brought by train from other parts of the state.

Mr. Umakant Umrao posted as the District Administrator took it up as a challenge to change the situation in 2006. He frequented the far flung areas of the district wondering for any successful examples and possible solutions. Hailing from a rural farming background coupled with acumen of civil engineer, and the numerous interactions he had with the farmers, Mr Umrao was able to appreciate the geographical and socio-economic scenario and develop deep understanding of the farmers' psyche that helped him frame a set of objectives for success of the mission.

Objectives

- To provide an affordable decentralized Surface Water Conservation cum Harvesting Structure as a Viable Irrigation Model.
- The initiative would be a simple business model with economic profit as end result and early break even.
- To evolve a complete integrated and user friendly package with problem identification, education and awareness, area planning, resource mobilization and infrastructural support.

Means/methodology adopted in achieving the objective:

The Idea:

The equation was simple that a pond based irrigation management system (investment in water) meant high profit, low risk, high replicability and higher asset value. The ground water recharge, increase in sustainability of natural resources, low energy consumption and bio-diversity had a supplemental impact on the ecosystem. Still the initial challenges were

- To develop technical models for customized solution which were economically viable for individual to invest / to construct keeping in the mind the soil, geological condition, terrain land holding, rainfall and location of farmer crop practices etc.
- To convince the farmers to contribute a part of their land for an irrigation tank or talaab.
- Arranging for the initial financial resource,
- Arranging for the infrastructure support and machinery to carry out the physical work,
- Easily available design and technology and
- Finally mobilizing the chronically underperforming delivery mechanisms (the bank and other government development extension systems) to actively support.

The Approach:

With this background Mr Umrao assumed charge of Administrator Dewas and one day in a routine meeting in a village where the farmers were narrating their problems one farmer, one of the farmer came up and told that he had earned Rs.20000 by sowing "Dollar chana" (Gram) in his farm with the help of khet talab (Farm Pond). This sentence.... all of a sudden brought in the steering up effect and a plan started taking shape.... *I need such farmers as volunteers... they can become the role model.* The thought was now moving from logic (mind) to –perseverance (heart). **A role model farmer, not necessarily rich should have surpluses in the form of land, money, risk bearing capacity and should be open to ideas.**

The idea was to educate the farmers on advantages vis-à-vis disadvantages of tube well and pond. Obviously the pond based irrigation scores over depleted deep well based tube well. But this had to be translated in a simple and rustic language. Mr. Umrao prepared handwritten letters to give a personal touch to the idea to sell Pond-based AWM (Agriculture Water Management) system. Besides multiplying the production the other clear cut advantages were low electricity bills, timely availability, biological mix in water, etc. The Khet Talab name was dropped to Irrigation Pond i.e. "Rewa Sagar", though it was still one tenth ponds and the catchy phrase was **"Pani Bachao, Labh Kamao (Save Water, Earn Money)".** The list ended with over 8000 possible Bhagirath Krishaks.

IEC and dissemination of new concept was made by arranging a training of master trainers (which were farmers only) organized mainly in the APMC premises (market). The openness of the APMC premises was preferred over the well equipped training/meeting halls of the Government offices. The reason was that a farmer is a farmer when he is in APMC he is in the mental make up of profit and loss and that means open to commercially oriented ideas. There was no structured module of training rather it was simply an evoking mechanism which prompted the farmers to calculate the water economy. Quite inline to the history of failed tube well story of Dewas, there were many such examples to quote to discourage farmers from bore well based irrigation. Still people were inclined to go for boring as they did not have any other solution. Investment in own farm pond was unthinkable as it meant double loss- loosing both land as well as money. This meeting was followed by village visits and small group meetings, where the team started sharing the concept slowly. Mr Umarao himself use to go on transect walk in water distress villages mainly durind the hottest time of day in summer while taking transect walk (Most of the time 10 -15 Km in a day in different villages) in the villages with people he use to pose questions which use to lead framers to do situational analysis of villages and of their own. After situational analysis the farmers used to be provoked by Mr umarao to analyze the different pro and cons of different options and future emerging situation with current practices. After the transect walk generally farmer themselves come forward with decentralized water conservation cum harvesting models. Once farmer excepts this model the technical help of machinery, credit linkages were helped by the district administration at every farmers needed technically different kind of structure. Many times acceptance of concept is more dependent on the propagator himself. Seen the enormity of the problem and psyche of the masses the early adopter among the farmers were projected as role models and for further movement they them selves become leaders. **The equation was simple that a pond based irrigation management system (investment in water) means high profit, low risk and higher asset value. The increase in bio-diversity was only a fringe benefit.**

The main points of approach are as follows:

1. Role model theory
2. Individual situational analysis process
3. Seeking solution rather giving prescription
4. Selling Profit, rater than human security profit as carrier
5. Creating trust and faith in leadership
6. Realizing them the economics of water vis-a vis investment
7. Realization of future water scenario and responsibility vis-a vis next generation.
8. Customized solution, Inclusive growth
9. Sustainable resource linkages and Coordination.

The Turning Point:

There was sublime response till one day a farmer Pop Singh, who would ideally fit into the role model farmer, came forward and said he was ready to invest on his land. A case was immediately prepared. The pond needed an investment of Rs.18 lakh (US$ 40000) and it meant a loan of Rs.14 lakh (US$ 31111). Banks were unwilling and were in no mood to cooperate and asked for guarantee as economic viability of investment on pond for irrigation was never estimated. This is where Mr. Umrao scored a point; he volunteered to give guarantee for that farmer. This was perhaps first time in the history of the country that a district Administrator who is the Chairman of District Lead Bank had volunteered to be a guarantee for a native farmer.
The bank had to submit though reluctantly.

Now, there were more farmers and the movement was slowly picking up. Mr. Umrao further volunteered that he will contribute manually in digging every such pond. He would go to the village in the hot summer's noon, walk 10-15 kms and contribute 11 Shovels in every pond (digging). He would always leave making an impression by his parting sentence which was always in line with ***"Pani Bachao, Labh Kamao*** **(Save Water, Earn Money)"**. Again the message was that the Administrator, a senior Administrative officer was coming in person and that it was the heart which was above the mind. This always convinced the farmers. As the list of volunteer farmers increased the district administration arranged "Rajasthani Tractors"* {Normal Tractor with skilled drivers specialized in digging ponds and making embankments} to increase the speed of work and bring the cost down and timely completion of ponds. The team of experts worked on the technical modalities by working on drainage line using topo-sheets. There was always an opening ritual which would touch the heart of natives. **The idea was to integrate technology and development with local faith and belief system.**

The Techno Economic Viability:

The core of this theory was that a pond was never looked as a water body stand alone, rather it was looked as an **Agriculture Water Management Solution** and the **nucleus of this solution was individual farmer**. The philosophy of water management was changed from a hypothetical community/ social service to an individual enterprise. **The investment made by the affluent among the community on land & water management resulted in direct irrigation to them and indirect moisture regime to the 'lesser haves' and the region prospered**.

The technical aspects were taken up very seriously by the team of experts at the district level and drainage line and catchments were taken in to account for all village structures. A total water treatment plan was prepared for the village, rather a cluster of villages as a whole to check near complete run off. Control rooms were setup at block levels for continuous guidance to farmers. Each structure was built with complete technical inputs (height, width, depth, etc) and **thus ensuring not a single failure**. Very soon the villagers became the master crafts men and trainers and this increased the pace and scope of works as the villagers were able to integrate local knowledge and technique. The banking institutions were directed to clear all hurdles and make early clearance of loans.

Meeting was convened of all machines (JCB and tractors) owners for standardization of rates and smooth functioning.

Personalized and strategic Information (Psycho Managerial Technique)

Instead of preaching the farmers' thought process was challenged urging him to think of his venture in agriculture and the profits. A strong convincing case of alternative profit model with early break even was projected for the farmer. Besides multiplying the production the other clear cut advantages were low electricity bills, timely availability, biological mix in water, etc.

The team of motivators were personally trained by the Collector and handed with simple IEC material prepared in local dialect designed by him. This helped remove ambiguity and add to the level of commitment in the team.

The openness of the APMC premises was preferred over the well equipped training/meeting halls of Government offices. The reason was that a farmer is a farmer when he is in APMC. He is in the mental makeup of profit and loss and that means open to commercially oriented ideas.

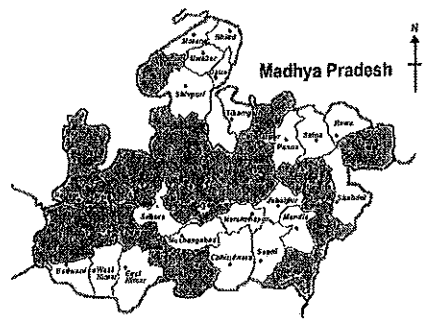
A lot of emotional quotient was added to the process. The initiative was also linked to the sustenance of the future generations. Each farmer who participated was called "Bhagirath Kishak" (Who brought the holy river Ganga from heaven to earth for quenching the thirst of his next generation) and the Pond as Rewasagar (Rewas / Narmada is a highly revered perennial river flowing through Madhya Pradesh province). This ensured ownership of the programme in the family as well. The catchy phrase was **"Pani Bachao, Labh Kamao (Save Water, Earn Money)".**

Felicitating

The whole IEC was planned, propagated and executed by the Young Administrator himself. The Young Administrator began to personally visit, contribute labour in digging the Pond and felicitate individual farmer who adopted the concept, which increased his social position. The Bhagirath Krishaks had an exclusive social class within a year.

Extent of Geographical area covered and target population benefited.

Initially started in Dewas district the movement has now spread in more than 25 districts of Madhya Pradesh covering 450 villages. The total rural population benefited is around two hundred thousand which includes small & marginal farmers.



Other Impacts:

Energy Use for Water Withdrawal

The level of water in the structure, when full, is generally very close to the field level, farmers often use only a small diesel pumping set to draw out water from the structure. Although using an electric motor for the purpose is more economical but access to electricity at the required location /point of water withdrawal may not always be possible. Even if it were possible to do so, availability of electricity at the required time cannot be guaranteed.

Now 80 percent farmers have been using diesel pumping sets for withdrawing water. Switching over to diesel engines for water utilization has enabled farmers to apply irrigation water at a time and in as much quantity as required by the crop, set the farmers free from the regime of an unreliable and inadequate electricity supply, and has helped the State Electricity Board, the utility responsible for electricity supply, to use the electricity so saved for other sectors. Since the electricity in Madhya Pradesh state in general is in short supply, opportunity cost of electricity allocated to agriculture is very high.

Soil Conservation:

Soils are a major reservoir of global carbon, and are equal in magnitude to the combined global carbon content of the entire atmosphere plus all aboveground biomass. Loss of agricultural soil carbon through erosion, management, and decomposition adds to the atmospheric loading of CO_2.

The runoff along with top fertile soil with organic matter collects in the Irrigation ponds and reused by the farmers. But most important the silt of farms will not go wasted to rivers rather it will get deposited in the ponds/ tanks which can be redeposit back to the fields, and with it the whole eco system will be preserved.

Impact on Livestock

Availability of fodder is an important factor influencing investment in livestock by the farmers. Lack of access to irrigation in the study region constrained availability of fodder and therefore investment by farmers in livestock. Availability of irrigation in the dry season leading to cultivation of wheat by farmers has to some extent eased the fodder availability in the area. Availability of wheat straw for use as livestock fodder has encouraged farmers to pay attention towards improving and expanding their livestock activity. Since livestock activity is also capital intensive, the progress on this front has been relatively slow. Rather than increasing the herd size the farmers are initially investing in improving the quality of their herd. Farmers are gradually replacing the existing low milk yielding stock of animals with improved breed animals. Some farmers have brought in high milk yielding cows and buffaloes from animal research universities. It has been noted that as the quality cattle breed has been introduced and milk productivity has increased up to 34 pc within a short period.

Biodiversity Conservation:

The region has overall become prosperous, bringing back the lost biodiversity. A pair of Siberian crane, which had vanished two decades back appeared and nested and it breed regularly in winters, flock of dears has now become a common visitor to quench their thrust from these ponds and more than that prides of peacock are often spotted dancing in the fields, but above all the team of gleaming farmers welcoming these fauna species as friends and guests.

Summary of report of impact assessment study, if any, undertaken by an accredited agency,

The United Nations 2005 World Summit Outcome Document refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection. Amazingly the programme establishes the statement in its true spirit with visible results on ground. **The following impact assessment studies conducted by independent organisations validate it:**

a. International Water Management Institute(IWMI) (FAO Recognised) has conducted a research study in two blocks of district Dewas of Madhya Pradesh in 2010.The following observations were reported:

- There is significant increase in Agriculture productivity from 30 to 300% depending on crop.
- Increase water table has rise from 50 – 200 feet
- There is significant increase in cropping intensity (from 120 to 198%) and substantial shifts in cropping pattern during Rabi (Second crop).
- Percent of operated area cultivated during Rabi (Second crop). has substantially increased (from 22 % to 98%).
- Availability of wheat straw as fodder has now encouraged farmers to invest in livestock
- Rather than increasing the herd size, the farmers are initially investing in improving the quality of their herd gradually replacing the low milk yielding stock of animals with improved breeds.
- Net result has been an increase in milk production by about 34 pc
- Irrigation cost has significantly reduced as water is pumped from shallow depth with a small diesel engine. Farmers have saved on electricity costs needed to run tube wells and also released electricity for use in other sectors.
- Significant improvement was noticed in living conditions of adopter farmers, like– purchase of tractors, vehicles, living conditions, education of children, savings/ repayment of old debts, etc
- The benefit cost ratio (B/C) was worked out 1.48 to 1.92 with a payback period of 2.5 to 3 years, and with government subsidy it was 1.72 to 2.39 with a payback period 1.9 to 2.6 Years.
- The wildlife (such as deer, wolf and other similar large animals) has substantially increased in the region.

b. Vibhawari, a NGO working in central India conducted an independent study in 4 blocks of Dewas district in 2007.They reported the following observations:

- During March, 2006 to June, 2007 (15 Month) fifteen hundred irrigation tanks were constructed by the farmers in their own land and with their own investment.
- Additional irrigation created in 15000 hectares.
- There was a marked 50 % reduction in electricity consumption.
- Water level increased up to 2-3 mts.
- People contribution 100 pc (Rs 78 crores (US$ 1733 million)

3 National level Non Govt. organisation "Centre for Advanced Research and Development" Bhopal conducted and external Evaluation study supported by Department of Panchayat and Rural Development, Govt of M.P. in 2008. They reported that the Bhagirath Krishak Movement has been able to increase-

- The total irrigated area of the district increased significantly,
- Increased total agricultural production as well as the productivity of each farm,
- Reduced electricity consumption by promoting other than electricity based energy sources,
- It has helped in promoting livestock production by regular availability of water and increased agriculture production.
- Marked increase in flora and fauna of the region by maintaining ecological balance in the region.
- A **'Jiladish'**- Young Administrator was fondly remembered by the villagers as **'Jaladish'**- ***(God of Water)*** the man who brought water in the region.

Source of funding

The movement started with farmers willing to forgo their own land as well as investment for digging ponds, with the district authorities providing overall technical supervision and logistic support. Banks were persuaded to provide loans, who reluctantly agreed on personal loan instead of agriculture loan on commercial rates of interest. Later on the State government announced a nominal subsidy by naming it balram talaab (Small irrigation ponds) but mainly these structures were by farmers by their own savings.

Record shows more than 6000 irrigation ponds have been constructed only in Dewas district with an approximate value of 66.67 Billion $ and only nominal contribution is by the government rest was born by farmers themselves (After seeing the success of the model the Govt. announced a nominal subsidy). A similar course of action is followed across other districts of the state. By estimate more than 15000 water conservation cum harvesting Ponds have been constructed in the state with an approximate value of 133.34 Billion $. The number is increasing every month.

Two letters of reference supporting the candidacy. Attached