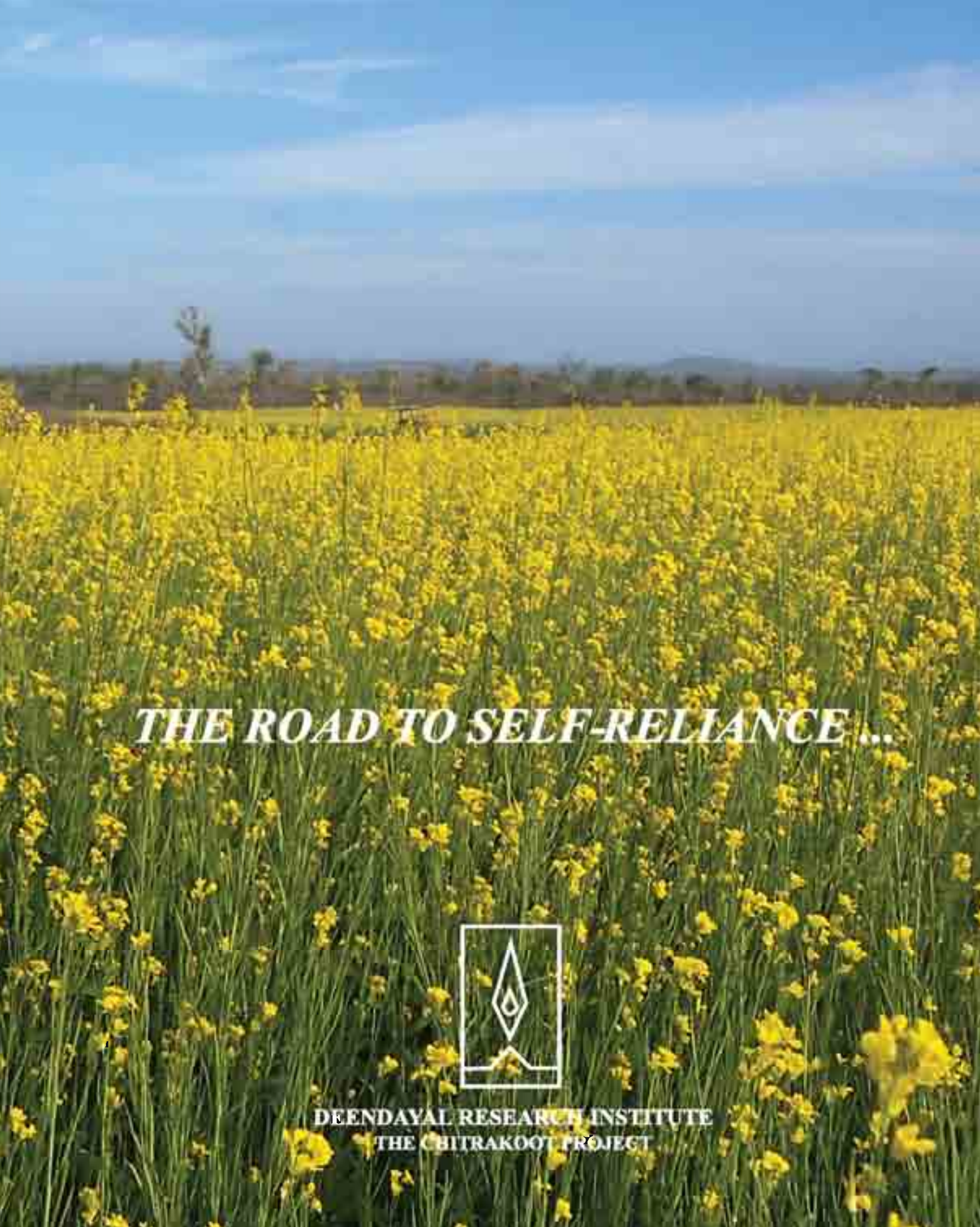
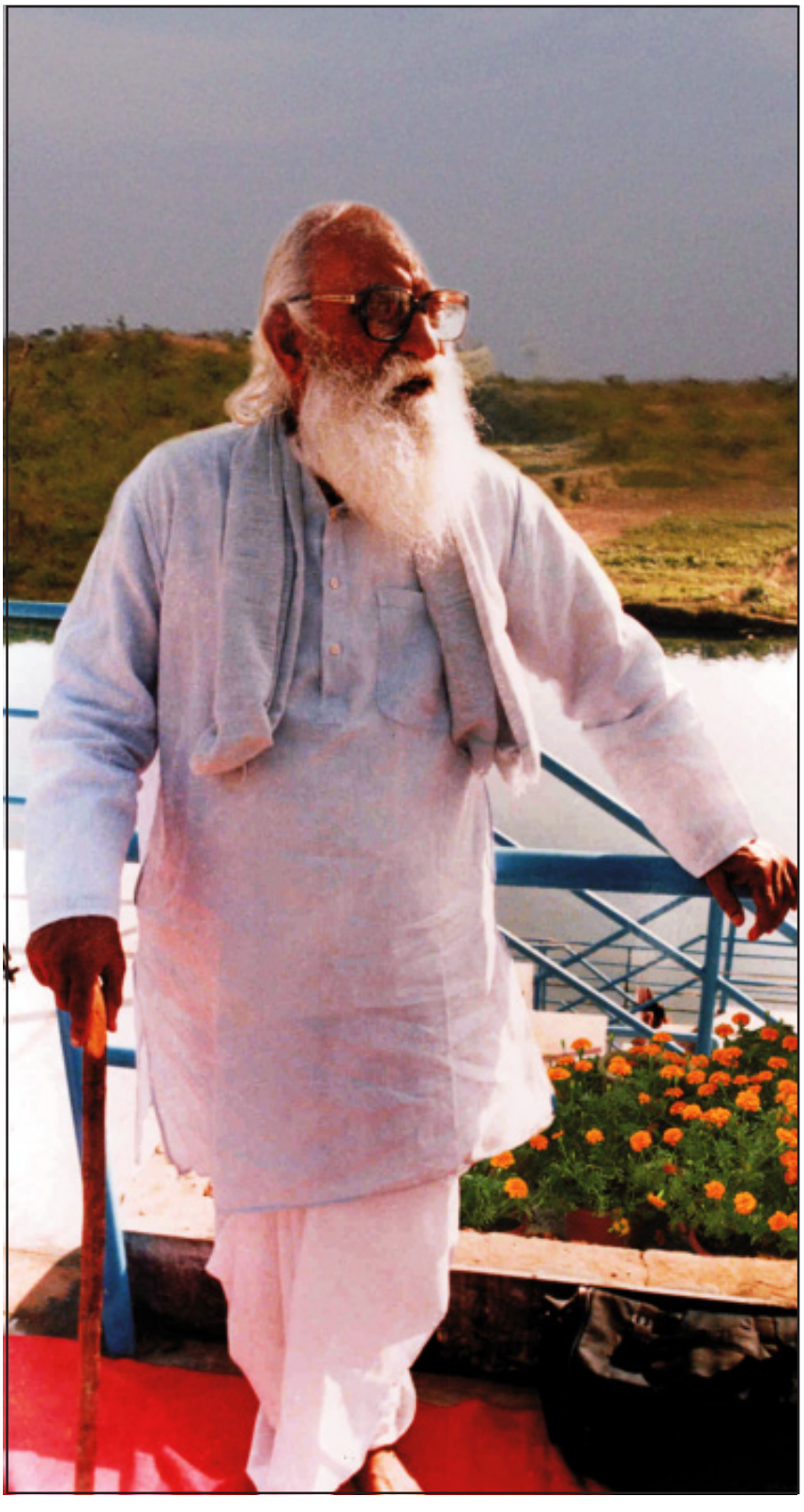


THE ROAD TO SELF-RELIANCE ...

DEENDAYAL RESEARCH INSTITUTE
THE CHITRAKOOT PROJECT



'I do not stand for myself but for my kith and kin; my kith and kin are those who are oppressed and neglected'

Nanaji Deshmukh

11/10/1916 - 27/02/2010

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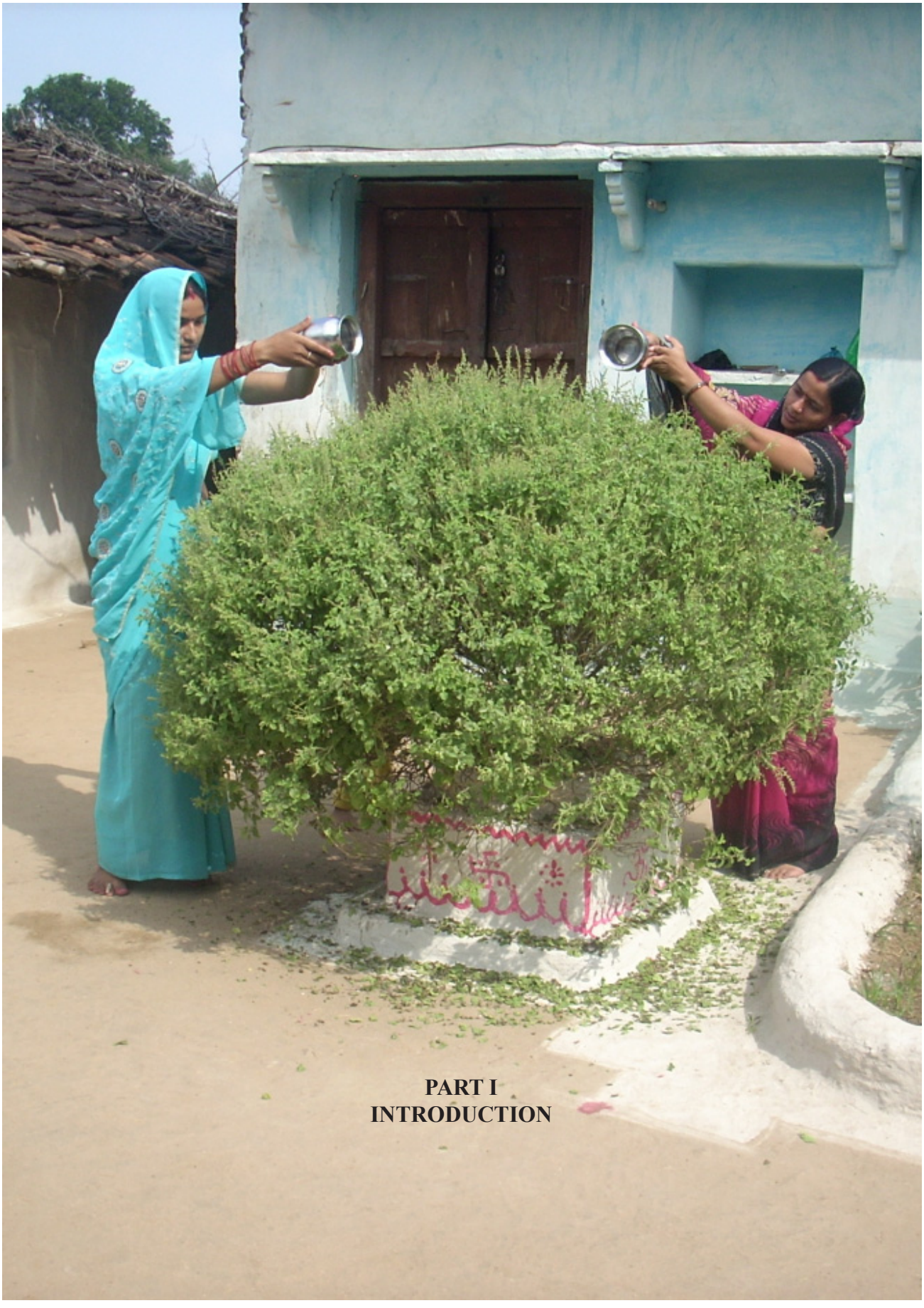


PART I
INTRODUCTION

Introduction:

The development of our villages is of critical importance for the economic development of the country. The route taken by successive governments for development through 5-year plans, that evolve at the top and are to permeate downwards towards the villages, has not been successful.

The Late Pandit Deendayal Upadhyaya extensively studied all the different aspects of human life and Indian society. Thereafter, he compiled his thesis, **'Integral Humanism'**, on what needs to be done, as a model and guide for a harmonious and progressive society. The need of the hour is to achieve the overall progressive development of our youth by following this philosophy.

The human body consists of several parts - each integral to the other. The functions of each part vary from the other, and are all carried out with absolute precision, without any interruption, thought or doubt for even a moment. They are engaged solely in keeping the body secure, functional and healthy. A healthy and strong body ensures that the requirements of every part of the human body are duly met. 'Complementarity' is the word Pt. Deendayal Upadhyaya coined for the functional flow of our body parts.

The relations between human society and its constituents, is similar to the relation between the human body and its parts, because the elements of society are also interdependent. The farmer produces food grains, vegetables and fruits that everyone in society consumes for sustenance. The weaver makes clothes for everyone to wear. Therefore, inter-dependence or Complementarity is the basis of a happy social life. Without fulfilling each and every essential need of society, neither an individual nor a family could pursue their respective careers or vocations with perfection and success. This is a natural law. Only if a social order is developed within the framework of this natural law, is it possible to realize the noble objective embodied in the saying "*Sarvey Bhavantu Suhkinah* - Let everyone be happy."

The greatest problem with developmental work since Independence is that it was discussed and formulated at the National level with inputs from the Districts and States - without people's participation. This ignored core local issues and the requirements of the particular area. It also ignored the need to awaken a sense of ownership and initiative in the people involved. As a result, these cost-intensive rural development schemes were unable to achieve their objectives. As Pt. Deendayalji said, "The process of development begins from the bottom and moves to the top. The roots of our nation lie in rural India. So the development of our society and country must begin from rural areas."

As Nanaji Deshmukh also maintained, "People's participation and initiative in rural projects increases their scope, stability and success rate."

Our Objective:

To give India a new direction is the need of the hour. People's initiative and local issues are a key component for any successful rural development programme. Complementarity and a social consciousness in society form the basis of a Nation's soul (*Chiti*). Without looking at the needs of a society *in totality,* no development programme can succeed.

Deendayal Research Institute (DRI), set up in 1968 by Nanaji Deshmukh to validate the philosophy of Integral Humanism, is currently working on such a project. DRI's ***Chitrakoot Project*** is an integrated and holistic model for the development of rural India, based on the principles outlines in Pt. Deendayal Upadhyaya's Integral Humanism, to create a society based on the Complementarity of the family, primary school and the local population. The ***Chitrakoot Project*** is a ***self-reliance campaign*** that was launched on 26th January 2002 and covered 500 villages around Chitrakoot in 2 phases. The 80 villages taken up in the 1st phase were declared self-reliant by 15th August 2005, and the remaining villages were declared self reliant and dedicated to society on 27th February 2011, the first death anniversary of Nanaji Deshmukh. Deendayal Research Institute conforms to Quality Management System Standard ISO 9001:2008 in the implementation of the Chitrakoot Project.

The self-reliance campaign covers all aspects of the individual, family and societal lives of the villagers. The key to the campaign is the concept of *Samaj Shilpi Dampati* (SSD), 'graduate' couples that live within the villages itself, and are responsible for motivating and guiding a cluster of 5 villages.

Foremost among the aspects covered is income generation. This is achieved by introducing watershed and soil management techniques where necessary; new and improved farming technologies through 2.5 and 1.5 acre model farms that enable small and marginal farmers - who account for 80% of the rural population - to look after the family needs; plus save. And by increasing Non-Farm Sector incomes through entrepreneur training and the formation of income-generating Self Help Groups (SHGs) that are both stand-alone, and vertically integrated.

Issues of health and hygiene are the second most important aspect of the campaign, as an unhealthy individual is incapable of working to improve his/her economic condition. Regardless of the manifold benefits of Ayurveda and Naturopathy, Allopathic intervention - when the ratio of doctors to population is in excess of 1:10,000 and the cost of medicine high, is impractical. Therefore, in issues related to health the ***Chitrakoot Project*** looks to Ayurveda and Naturopathy to keep villagers healthy. Locally available herbs and nutritional vegetable gardens are the key interventions used in this area, including a *Dadi ma Ka Batua* (grandmother's pouch), a collection of 34 Ayurvedic local herbs and preparations that can be used to treat common ailments. Where Ayurveda is not applicable, as for example in Dentistry, state-of-the-art facilities have been provided at Arogyadham, Deendayal Research Institute's Hospital and Research Centre for Yoga, Naturopathy & Ayurvedic Sciences at Chitrakoot.

Illiteracy and social consciousness is the third area covered by the campaign. Adult literacy classes are conducted for the villagers by the *Samaj Shilpi Dampati*, our Educational Research Centre and the 4 schools that operate within the Project area. Ram Darshan, a unique museum that highlights socially relevant aspects of Lord Rama's life helps villagers inculcate human values to encourage them to live in a spirit of co-operation and harmony with each other. The *Samaj Shilpi Dampati* work with the villagers on the principles of mutual co-operation to ensure that the village is litigation free, and also on personal and village hygiene to make the village 'clean and green'.

Deendayal Research Institute is confident that its self-reliance model, based on the universal principles of Integral Humanism that is both replicable and sustainable, can be a model for the future of India as also for global developmental problems.

The Self-Reliance Campaign:

On 26th January 2002, villagers from 80 of the 500 villages that form the 1st phase of the Self-Reliance Campaign took the following oath: *"We all the villagers, with mutual cooperation, will make our village self-reliant. By 26th January 2005, we will eradicate unemployment, poverty, and illiteracy from our village. Every family of our village will become self-reliant and prosperous. We will see to it that no dispute of our village will*

reach the court and all the old disputes will be settled amicably at our village level. We will also see to it that our village will become green and clean and will build our village into a model of self-reliance."

Our Current Infrastructure:

To enable the project to succeed, Deendayal Research Institute has established a host of institutions and centres to give inputs to the villagers for their success in the self-reliance campaign. These include:

1. Krishi Vigyan Kendra (KVK), Majhgawan (M.P.) - a 63 acre model farm that reaches out to farmers in the villages of the self-reliance campaign situated in Madhya Pradesh helping them to increase both farm and non-farm income through watershed management, improved sustainable agricultural inputs both on-farm and farmer's fields and training in various disciplines.

2. Krishi Vigyan Kendra (KVK), Ganivan (U.P.) - a 50 acre model farm set within a 150 acres DRI campus that reaches out to farmers in the villages of the self-reliance campaign situated in Uttar Pradesh helping them to increase both farm and non-farm income through improved sustainable agricultural inputs both on-farm and infarmers' fields and through training in various disciplines.

3. Arogyadham - The Ayurveda & Naturopathy Campus at Chitrakoot is the key centre for maintaining good health among the villagers. Within the 45 acre campus are:

    a. Out-patient Department with modern diagnostic equipment

    b. In-patient Department for 40 patients

    c. Maternity & Pediatric Centre with operating theatres and a neo-natal pediatric wing

d. Yoga & Meditation Centre

e. Fully equipped Naturopathy Centre

f. Ayurvedic Research Centre for Ayurvedic Herbs and Preparations

g. Modern Dental Unit

h. Ayurvedic Research Library

i. Herb Garden

j. Ayurvedic Doctor Outreach programme

k. Herbal Remedies Kit (*Dadi Ma Ka Batua*) for treating common ailments

4. Udyamita Vidyapeeth - A production-cum-training Centre that consists of a complex of over 19 industrial sheds, 4 hostels and an administrative block to impart training to villagers in various income-generating skills. The Centre is actively involved in the self-reliance programmes and has innovated vertically integrated Self-Help Groups and the concept of 'one village-one product'.

5. Surrendra Paul Gramodaya Vidyalaya - A comprehensive primary, secondary and high school situated in Chitrakoot that serves 1,200 students from in and around Chitrakoot.

6. Parmanand Ashram Paddhati Vidyalaya - A residential co-educational school for 125 scheduled caste children located in Ganivan.

7. Ramnath Ashramshala - A residential co-educational school for for 200 tribal children located in Chitrakoot.

8. Krishna Devi Banwasi Balika Awasiya Vidyalaya - A residential girls school for 120 girls from tribal families.

9. Gurukul - A unique experiment that houses 250 children with retired couples in groups of 25 children that inculcates values in the children and helps them to study and grow in an inspiring atmosphere.

10. Chitrakoot Ras Shala - The in-house Ayurvedic pharmacy that caters to the medicinal needs of Arogyadham and also markets 35 Ayurvedic preparations.

11. Gramodaya Darshan Park - A permanent exhibition where all the innovations and interventions used in the self-reliance campaign can be seen in working models as also other innovations that could be used in villages.

12. Govansh Vikas Avam Anusadhan Kendra - The Gaushala in Chitrakoot in engaged in maintaining pure Indian breeds, research in cross-breeding of Indian cows, and also an Artifical Insemination (A.I.) programme for improving the livestock yield and bullock performance in the villages in the self-reliance programme.

13. Resource Centre - Controls the inputs of the Samaj Shilpi Dampati - the 'graduate' couples that live in the village and serve as the catalyst of change in the self-reliance campaign. They are the nodal point through which all interventions of DRI flow to the villagers in the self-reliance campaign.

14. Educational Resource Centre - Innovates new educational aids for schools and adult literacy.

15. Ramnath Goenka Smarak - A public bathing ghat for the people of Chitrakoot on the banks of the holy Mandakini river with separate enclosures for men and women.

16. Ram Darshan - a unique museum to inculcate the social values and ethics embodied in the concept of Ram Rajya, using paintings, bas-reliefs and dioramas to depict socially relevant scenes from Lord Rama's life.

Udyamita Vidyapeeth

One of the major causes of the extreme poverty in rural India is that 80% of the rural population are small and marginal farmers, who cannot generate enough income solely from agriculture to cover their needs. To enable the rural poor to earn enough, non-farm sector income, to supplement their agricultural incomes, is a necessity.

The Rural Non-Farm Sector today is plagued with problems. The main problem is that this sector is predominantly 'own account enterprises' (OAEs) that are family based and therefore very small enterprises. Due to a lack of organisational support for these enterprises, the cost of distributing their products to market areas is high, and consequently most of them are run at a subsistence level, or at best, provide a subsidiary source of income.

Also, in India, most vocational training institutes are Government run and their curriculum is decided by a central office that has no connection with the area where the training is conducted. The policy decisions are centralized and the courses universal across all the institutes. This results in many of the students receiving training in vocations for which there is no local demand. The training is thus wasted or the students migrate to urban areas where his or her new skills could have some demand. These Institutes are *training-cum-production* centres.

Udyamita Vidyapeeth, the Entrepreneur Training Centre of Deendayal Research Institute in Chitrakoot, is working on resolving these lacunae. In Udyamita Vidyapeeth, before starting a training course, a production unit is established and run by the Institute for a minimum of 6 months to ensure that the unit can be profitable. If the unit proves to be unprofitable, no courses are conducted in that particular activity. Only if the profitability of the unit is established, is the course started. It is a *production-cum-training* centre. The choice of what training is to be conducted is dictated by 2 main factors: need based; and resource based. Village youth are brought or invited to the Institute and given a tour of all the various income-generating training options available to them. They are then encouraged to join the course that has attracted their attention. Although some courses are conducted on campus, most of the training is conducted in the villages themselves.

Udyamita Vidyapeeth also acts as the marketing wing for local produce. Migration from the villages can only be stopped if villagers are given the opportunity to earn in the village itself. To achieve this, Udyamita Vidyapeeth has started a multi-level employment model that allows value addition to farm and forest produce by semi-processing in the village itself. For example, Aonla, a fruit that grows wild in the Chitrakoot forests and is one of the richest natural sources of Vitamin C, was earlier picked and sold by the villagers for Rs. 4 per kg. If the Anola is deseeded and then sold, the value is Rs. 8 per kg. If it is further processed and boiled and turned into a paste, the value increases to Rs. 16 per kg. Udyamita Vidyapeeth helps and encourages the villagers to add value in the village itself. (They are organised into Self Help Groups (SHGs) throughout the production, both on and off the campus). It then purchases the semi-processed product, completes the production process in the campus to ensure quality control, brands and then markets the product. The profits from the sale are shared equally by all the SHGs involved in the process. For some products, mainly non-edible products, like carpets and tailored items where quality control is possible in the village itself, the product is finished in the village and marketed through the Institute.

The training imparted by Udyamita Vidyapeeth is not restricted only to youth but covers all age groups. Any villager with a desire to increase their income by developing a new skill is encouraged and taught.

Many of the villagers are unable to start a small business as they are unable to raise the capital they require (usually between Rs. 5-10,000/-). Udyamita Vidyapeeth has started a small micro-finance fund that gives interest-free loans to needy villagers. As the loan is given during a function in the village itself, and made into an issue of honour, no villager has defaulted as yet.

With these innovations, Udyamita Vidyapeeth has succeeded in overcoming many of the problems that have plagued the rural non-farm sector and hopes that these innovations would be replicated in other districts in India.

Krishi Vigyan Kendras

During the past five decades, subtle changes in rural India and agriculture have been observed as a result of planned development. There has been satisfactory improvement in food grain production due to the Green Revolution. In spite of it, there is a need to accelerate production to nearly 230 million tonnes, to meet the needs of the growing population.

To achieve this, there is a need for effective transfer of technologies and better utilization of the available resources. For this, dynamic and efficient extension services are needed. For this purpose, ICAR launched the Krishi Vigyan Kendras (Farm Science Centres) in 1974 for the transfer of argicultural technologies to the doorsteps of the farming community.

The Krishi Vigyan Kendras are down-to-earth institutions, committed to the transfer of technologies, serving as lighthouses for overall rural development. The Krishi Vigyan Kendras are designed to impart need-based and skill-oriented vocational training to the practising farmers, farm women, in-service field level extension workers and to those who wish to be self-employed.

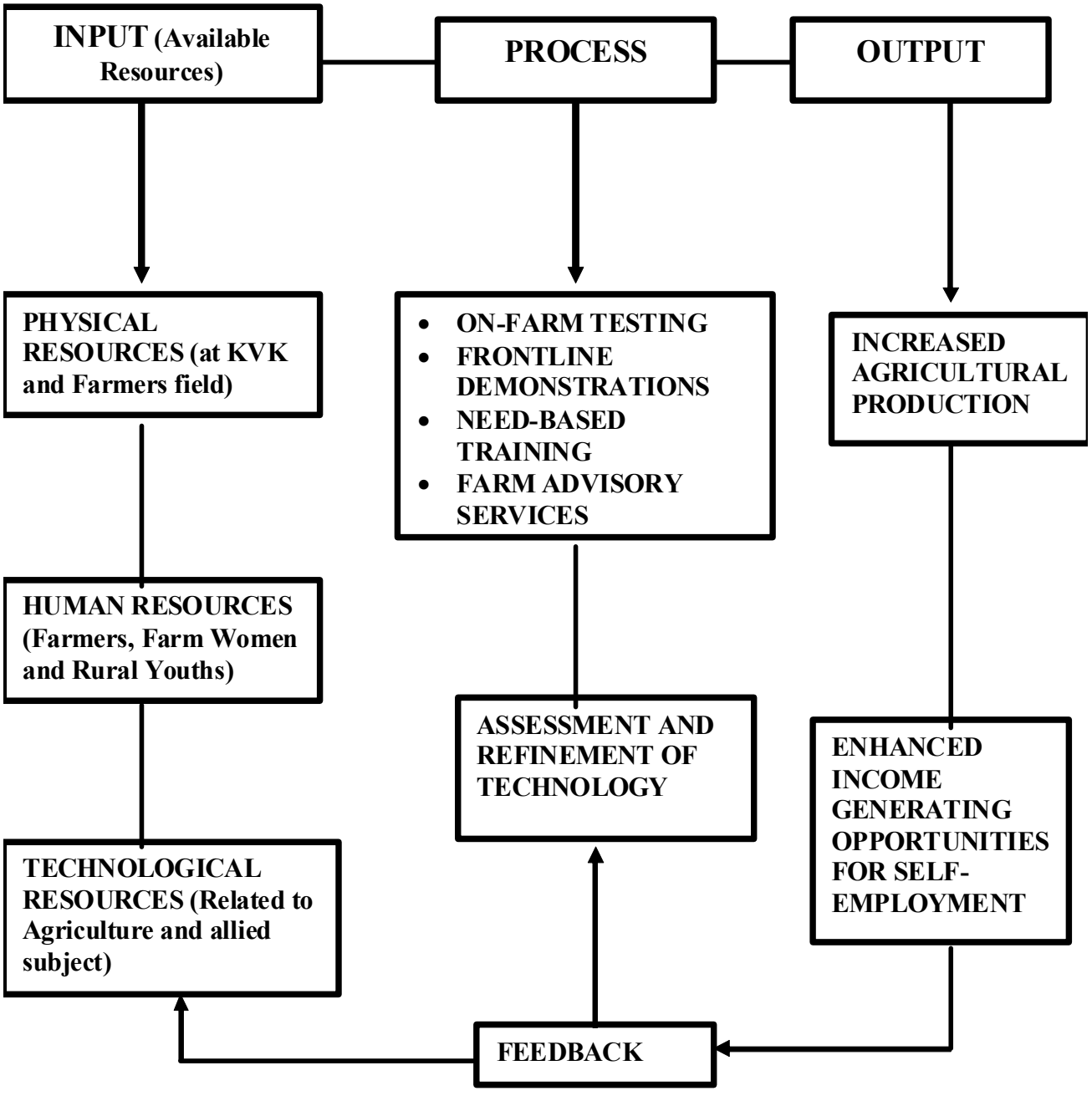
Concept and Principles of Krishi Vigyan Kendra

The main aim of the Krishi Vigyan Kendra is to act as a lighthouse to the farming community and give vocational training in agricultural and other allied fields on need-based technologies. The main objective of the Kendra is to impart the latest technical knowledge to the farmers through work experience, employing the principles of 'Teaching by Doing' and 'Learning by Doing'. These training programmes are aimed at increasing farm incomes through reduced production costs, and the adoption of integrated farming and pest management practices, creating awareness of the importance of bio-fertilizers, bio-pesticides and helping women to take up income generating activities. These vocational training programmes help them to improve their earnings in the rural areas. Thus, the three fundamental principles underlying the implementation of Krishi Vigyan Kendra are: (i) Increasing Agricultural Production (ii) Imparting training through work experiences, and (iii) Improvement in the living standards of weaker sections of society.

Mandates

- To test, refine and transfer agricultural technology through on-farm testing, through participatory mode, keeping in view the prevailing farming systems and situation through participatory mode.
- To plan and conduct long-term and short -term vocational training programmes in various enterprises of agricultural production.
- To organize need-based and demand-driven in-service training/ workshops for extension officials.
- To conduct demonstrations on technologies related to production, processing and value addition in various agricultural enterprises**.**

WORKING PATTERN OF KVK



Arogyadham

Man's physical body is home to his soul. Though perishable, it must be kept healthy and in good condition, in order to achieve its purpose in life. It was an appreciation of this fact that gave birth to the sciences of Yoga and Ayurveda. Yoga links each organ of the body to the organismic whole - uniting body and soul. Ayurveda is the science of longevity, of which curative medicine is only a small part.

To live, man has to sustain his body. In this respect, he shares certain traits with other species of the animal world. The most common of these are the need for food and drink, the need to sleep, the compulsion to procreate for perpetuation of the species, and the instinct for survival.

In animals, these basic physical functions are instinctual, and wholly governed by nature. Animals cannot transgress the limits set by Nature, and as long as they remain within their natural habitat, they are unlikely to lose their vigour and become unhealthy.

Man, on the other hand, along with the body, is blessed with a mind, intellect and a soul. Perception and imagination are faculties of the mind, reason and inventiveness stem from the intellect, and within the soul lies his emotional and ethical substance. Man has also been endowed with the power of creativity and a conscience, that gives him the power to discriminate between right and wrong. All these attributes make man unique.

Man, however, is also susceptible to the temptations of greed and lust. Disregarding the essential balance of life, and the power of discrimination, man has become a slave to unrestrained sensual pleasures. This unfortunate human disposition to live an unnatural lifestyle, causes imbalances in the psycho-physical-intellectual-spiritual make-up of the individual. Over-indulgence in sensual pleasures causes ill-health, sometimes endangering life itself. This has necessitated a major spur in Man's requirement for drugs, remedies, clinics and hospitals. The advances made in medicine and surgery have achieved remarkable success. Yet, despite qualitative and quantitative advances in healthcare, many diseases remain resistant to drugs, and new drug-resistant viral strains continue to appear. The failure to control certain killer diseases has caused despondency in allopathic medical circles.

This dilemma has engaged the attention of many thinkers for some time now. The World Health Organisation (WHO) coined the slogan "Health for all by the 21st Century". But if health issues are pursued with the current methodology, it is difficult to visualise how this commendable slogan will be realized. There is a basic contradiction in remaining confined by an approach that only looks at symptomatic cures. Without a radical new a approach to the subject, it does not appear possible to eradicate disease, let alone ensure 'lifelong health'.

Hence, a new approach is required. India's two ancient *Shastras* (sciences), Yoga (including Naturopathy) and Ayurveda, provide pointers to finding an alternative path, as their main goal has always been the maintenance of lifelong health. These *Shastras* do not treat the body in isolation, but treat it as a part of a psycho-physical-intellectual-spiritual continuum.

The key to lifelong health lies in maintaining a subtle balance between body, mind, intellect and soul - the four aspects of human life. To achieve this, it is important to establish a model that puts the theory into practice.

In pursuance of this goal, Deendayal Research Institute, has established, **Arogya Dham** - The J.R.D. Tata Foundation for Research in Yoga, Naturopathy & Ayurvedic Sciences. The Arogya Dham campus, spread over 45 acres on the banks of the Madakini river in Chitrakoot, aims at providing a model for the realization of a new life system, by taking a total overview of human development with Yoga, Naturopathy and Ayurveda. As the objective is to study the impact of parentage, family background, environment, upbringing, as well as the properties and effect of Yoga and Ayurveda on a life adapted in accordance with these principles.

Samaj Shilpi Dampati

Deendayal Research Institute's (DRI) commitment to the implementation of the development process from the bottom to the top, i.e. formulated at the village level, necessitated sustained interaction with the villagers themselves to understand their problems and motivate them to change. However, after decades of exploitation, villagers are extremely wary of the intentions of outsiders who come to their villages claiming to want to help them.

The only way to gain their confidence and trust was to have committed social workers live within the community itself. The realization of this basic reality, led DRI to evolve the concept of grass root level functionaries known as ***'Samaj Shilpi Dampati'*** **(SSD)**, a newly wed graduate couple that have the sense of commitment towards community service, to live and work in the village for a period of five years. The SSD would work in a cluster of five villages.

After an orientation and training camp, the SSD are taken to the village where they live either in the primary school or with a family that is sympathetic to the cause of social development. After first gaining the trust of the villagers, by their open commitment to the betterment of all in the village, starting with the children, the SSD, then start to talk to the villagers about change. The SSD are *catalysts of change*, and key functionaries in DRI's self-reliance campaign. In all areas of the campaign – increasing incomes; removing unemployment; improving agricultural techniques; education; health & hygiene; clean & green village; to help them resolve their disputes at the village level itself; and increasing social consciousness in the villages by encouraging them to live in harmony with mutual respect and Complementarity – the SSD act as a nodal point for all interventions by DRI units.

The success of the self-reliance campaign is directly linked to the success of the *Samaj Shilpi Dampati.*

The Self-Reliance Campaign - An Outline written by Nanaji Deshmukh.

More than half a century has passed since we got our Independence. But neither our country nor its citizens could achieve self-reliance. As a result, all of us are becoming victims of various injustices.

The Noble Goal of the Freedom Struggle:

Only the rulers and administrators are enjoying the fruits of Independence. The status of the common man is still the same as it was during the pre-Independence period. This was definitely not the goal of our freedom fighters. Our Independence was achieved with the aim of providing all the citizens of our country with a dignified and self-reliant life. Inspired by this noble goal, numerous freedom fighters underwent terrible tortures and even sacrificed their lives for our freedom.

Independence was for Self-Reliance:

In the post-Independence period, constant efforts were required at the social level to achieve self-reliance. For centuries, our country had been under foreign rule. During this long period of servitude, the spirit and quest for self-reliance and a dignified life almost vanished. To revive this spirit after Independence, an all-out effort was required. But unfortunately, we equated Independence with self-reliance. This was merely self-deception. Unless we get rid of this fetid concept, it will be impossible to attain self-reliance in our social, economic and political life. Unless the goal of self-reliance is achieved, the Independence we earned through hardship and sacrifice will be worthless.

The Sad State of Affairs:

After Independence, in 1969 the then Prime Minister, the late Mrs. Indira Gandhi, aimed to eradicate poverty from our country. Although 32 years have passed since then, many people in this country still die of starvation. Even the Supreme Court has reiterated this fact. Hundreds of poor children can be found begging at railway stations, bus stands and city streets. These children rush for food that is thrown away as garbage. This is the pitiable scenario even 54 years after Independence. If we continue in this way, then how and when will the future of this country be built?

Frightful Unemployment and the Danger of Disintegration:

After Independence, our rulers tried to develop India through the bureaucracy, using money power. These efforts did not yield the expected results, in either the economic or social sector. In fact, on a broader level, these efforts have resulted in growing social disintegration, unbearable economic disparity, and dreadful unemployment. With constantly increasing lawlessness, the atrocities and injustices inflicted on the people are ever increasing.

Neglecting Peoples' Power and Financial Extravagance:

Long periods of servitude have made the people rely on 'government for any thing and everything'. After attaining Independence, this slavish mentality of 'dependency on government' should have been removed from the minds of the people. But this task was overlooked. Developmental work in the country was carried out through the bureaucracy with money incentives. Until the citizens of our country take the initiative for their own development, the bureaucracy and cash incentives alone cannot achieve economic and social development. This fact is being overlooked. As a result of this, inspite of foreign loans to the tune of lakhs of crores of rupees, we are unable to eradicate poverty and unemployment in the country. Disappointment and unrest among the people is growing. On the one hand, the potential of peoples' power is being neglected, and on the other, money is being poured into development schemes, that have given rise to laziness among the people and corruption in the administration.

The Goal of Deendayal Research Institute:

This is the sad state of affairs of our country even after 54 years of independence. In such a despairing situation, the need of the hour is to infuse a spirit of hope and confidence among the people for building the future. Deendayal Research Institute has resolved to develop a model to serve this purpose. To achieve this goal, our only capital is the strength of the people and available resourses.

Self-Reliance Campaign:

A self-reliance campaign is being conducted by Deendayal Research Institute in 500 selected villages around Chitrakoot. At the initial stage, inaugurated on 26th January, 2002, this experiment was carried out in 80 villages. Preparations for the campaign started in October, 2001.

Five villages form a cluster. So there were 16 clusters in the initial stage. For every cluster of 5 villages, one *Samaj Shilpi Dampati* (a recently married and graduate 'Social Architect couple') was appointed to work as the coordinators for the self-reliance campaign. Both husband and wife are graduates. Both of them are conversant with village life and have a deep affection for the people. 16 *Samaj Shilpi Dampatis* have been appointed, all of whom have been trained at Deendayal Research Institute.

On the morning of 26th January, 2002, at the centre of each village cluster, all the villagers (men, women and children), gathered together for the hoisting of the national flag. They were administered the following oath

- 'We, all the villagers, with mutual cooperation, will make our village self-reliant. By 26th January, 2005, we will eradicate unemployment, poverty, and illiteracy from our village. Every family of our village will become self-reliant and prosperous. We will see to it that no dispute of our village will reach the courts and all the old disputes will be settled amicably at our village level. We will also see to it that our village will become green and clean and will build our village into a model of self-reliance.'

Our Goal:

244 of ta total of 512 villages are in Satna district of Madhya Pradesh and the remaining 268 are in the Chitrakoot district of Uttar Pradesh. Deendayal Research Institute has an Agricultural Science Centre *(Krishi*

Vigyan Kendra) in each of the districts. These Centres were allotted to Deendayal Research Institute by the Indian Council of Agricultural Research. Agricultural scientists from these centres participated in the self-reliance campaign. The campaign will be completed by 27th February, 2011. These efforts will make all the 500 villages in Chitrakoot self-reliant by 2011.

India is Blessed by Nature:

In many senses, nature has made India self-reliant. From Kashmir to Kannyakumari, and from Manipur to Kutch, one can see all types of climatic zones and land patterns available in the world. It is as if nature has bestowed a mini-version of the world on India with a mission to lead the rest of the world development process.

India has the highest mountain ranges in the world. A large network of perennial rivers; big and small lakes and other water bodies are spread all over the country. It also has a 8,000 km long coastline. The country has vast forest cover. Our soil is rich in all sorts of minerals. India is also rich in its variety of birds and animals. Our country has all the three seasons. India also has an unlimited source of solar energy.

Our Great Motherland:

Russia, China, America, Canada, Australia, Western Europe and Brazil — each of these have more land available than India. But India is blessed with more cultivable land than them.

India has 190 million hectares of arable land — whereas America has 177 million hectares, China has 124 million hectares, the old Soviet Union had 123 million hectares, Western Europe has 77 million hectares, Australia has 56 million hectares, and Brazil has 53 million hectares.

The Indo-Gangetic Plain extends from Punjab in the West to Gangasagar in the East. It is considered to be the single largest, most fertile plain in the world. This unique arable land is about 3,000 km long and 250-450 km wide, spread over an area aggregating about 80 million hectares. This huge land mass has such soft soil to the extent that there is hardly any stone or rock to a depth of 1,000 ft. Water flowing from the Himalayan rivers, carries with it soft fertile soil, which rejuvenates the land each year.

In addition to this, the arable land in the Eastern and Western coastal areas is equally fertile and productive. From the Konkan on the Western coast to the Malabar on the Southern coast, though the arable land is narrow, it is highly productive. The width of the available land here is on average 7 km. On the Eastern coast, arable land spreads from Kalinga (Orissa) to Coromandel (Tamil Nadu), including the Andhra Pradesh coast, which is wider. The arable land on the Eastern coast is naturally irrigated by the Eastern-bound rivers of the great Southern plateau. The most productive agricultural land of the Eastern and Western coasts is about 40 million hectares. The rest of the cultivable land is on the Southern and Central plateau. This wide area falls in the water basin of many rivers.

The Blessings of the Himalayas:

India is gifted by nature with the Himalayas - the highest mountain range in the world. Though geographically the Himalaya is shared equally by India and Tibet (now China), it is more favourable to India as all the water flowing from the Himalayas — both rain water and water from melting ice - flows to India alone. The Ganga, Yamuna, Bramhputra and Sindhu (major portion in Pakistan), are all perennial rivers that originate in the Himalayas and flow through Indian land (Pakistan is a natural part of India), irrigating Indian land all through the year.

The Need of the Hour :

Nature has left no dearth of any sort for the sons and daughters of India. The only need of the hour is for us to make an all-out effort. That is all that is required to achieve the goal of self-reliance.

Agriculture:

Since ancient times, Indians have used the proverb *Annamaya pran* (Man cannot survive without food). This proverb is nothing but a fact of life. And the only source for this invaluable food is agricultural land. In terms of available arable land and productivity, India stands first in the committee of nations. But it is extremely sad, that in comparison to other countries, the current per acre production is quite low. About two hundred years ago, Indian agricultural productivity was the highest in the world.

Ill Effects of Landlordism:

In their own interests, foreign rulers enforced landlordism in India. This system helped the then rulers to collect taxes from the peasants. But this system was certainly not conducive for agricultural productivity. As the land was owned by a landlord and he dictated the terms to the tillers, the tillers had to obey them. Tillers were not free to exercise their own choice in farming. For this reason, during the freedom struggle, freedom fighters simultaneously fought against landlordism.

After Independence, the government abolished landlordism. A 'Land to the Tillers' Bill was enacted. Though landlordism was abolished through this Act, in reality, very little was done. There are still many big land owners who have much more land in their possession than is legally permitted. They clearly violate the prescribed land ceiling. These big landlords influence a large chunk of voters in their region. That is why political leaders rely mainly on such big land owners for votes and are indebted to them.

Our Wrong Agriculture Policies:

After Independence, our agricultural policies were influenced by the big landlords. As a result of this, the large and needy section of small peasants were neglected. That is why, even after 54 years of Independence, three quarters of our agricultural land remains uneconomic. Because of this lacuna in the agricultural policy, not only have small farmers remained below the poverty line, but our country has not prospered agriculturally.

The Need for Constructive Attitude and Activities:

In the fight against foreign rule, non-cooperation, strikes, *bandhs* and other destructive measures were justified. But after Independence, these destructive activities cannot have any role. Such destructive actions can only become obstacles in the development of our society and country. Moreover, our new generation is misguided by such activities. In the post-Independence period, only constructive activities should have been promoted. Deendayal Research Institute believes in this attitude.

In the Satna district of Madhya Pradesh - more specifically in Majhgawan of the Chitrakoot region - Deendayal Research Institute has successfully proved that uneconomic holdings can be converted into economic holdings. It is assumed that landholdings of two and a half acres and less are non-profitable units. Deendayal Research Institute has now proved that even such small unit owners can save Rs. 5000/- per year after meeting their family's annual expenses. Actually, these farmers can now contribute to the nation's capital formation also. This contribution can grow even bigger. The then Director General of the Indian Council of Agricultural Research (ICAR), Dr. Paroda, and the Director General of CAPART, Shri Rangan Datta, were overwhelmed to see these successful experiments. These models are examples of how constructive programmes can be of great help in the development of our nation.

In Deendayal Research Institute's self-reliance campaign, the programme of converting uneconomic holdings into economic holdings will play a major role. The illiterate marginal farmers of uneconomic holdings are today considered as deadweight in the country. But tomorrow, the same farmers will play a leading role in the development of the country. Our aim is also to achieve the highest agricultural productivity per acre in the

world. At present agriculture is considered to be a loss-making business. Unless we convert it into a profit-making one, our country cannot achieve prosperity.

Irrigation:

To increase agricultural production, 'Irrigation Management' is a must. Rain water can only provide required water for the *kharif* crop. Nowadays, even rain water is not regularly available. The pumping of ground water has increased at an alarming rate, and recharging of the ground water has been neglected. As a result, the water table in the country is rapidly decreasing. Wells in the villages are drying up. That is why in many villages, drinking water has become a serious problem.

Rain water is wasted every year. The tradition of preserving rain water has almost vanished. Rain water is no longer added to the ground water. In old times, generally villages had ponds which were used to recharge the ground water. Now they are drying up. Many lakes have been brought under cultivation. Because of the failure to recharge the ground water with rainwater, the water table is receding very fast. Serious attention has to be given to this problem.

Water Scarcity and the Solution:

Deendayal Research Institute, through the efforts of its scientists of the Krishi Vigyan Kendra, has tried to tackle the problem of water scarcity. In many villages, people are forced to carry drinking water from a distance of 5-6 km. At least one person (generally a woman) from each family had to engage herself for the whole day in fetching drinking water. A meeting of villagers from 19 such villages was called. The villagers were brought together to make sincere efforts to solve the drinking water problem. They happily and enthusiastically agreed to do this work on their own. During this period, the Madhya Pradesh government announced the *Rajiv Gandhi Jal Prabandhan Yojana.* As a result of our efforts, Deendayal Research Institute was given the responsibility for implementing the scheme in these 19 villages. Under the able guidance of scientists from the Krishi Vigyan Kendra, villagers started constructing check dams in their region to store the flowing rain water. Men, women and children, wholeheartedly engaged themselves in implementation of this programme. As they were to be emancipated from the scarcity of drinking water, these villagers completed the construction work prior to the rainy season. No cement or steel was required. Only locally available stones and mud were used for the construction of these dams. Initially, the 'leader type' people of the area said that these dams would not last even during the first rains. But they did. Water remained stored in the pools created by these check dams. The same water recharged the ground water. Now there is 10-15 ft. of water in the local wells, even in the months of May and June. These wells previously used to go dry. As a result of these massive efforts, more than 12,000 hectares of agricultural land has come under irrigation. The level of confidence of the local farmers has increased tremendously. Now the Indian Council of Agricultural Research is encouraging scientists from other KVKs to visit and study this model experiment.

Productivity of Land:

Every crop consumed the fertility of the land. To rejuvenate its productive capacity every year, the land needs fertilizers. Crop development is an organic process. So logically speaking, fertilizers should also be organic. Western countries seem to be unaware of this fact. The tradition of agriculture in those countries is quite new. They have less experience in agriculture. Europeans settled in America. In America, each farmer owns more than 700-800 acres of agricultural land and it is impossible for a single family to manage such large farms. That is why they adopted mechanized farming methods, and started using chemical fertilizers. This is how farming is done in America. To achieve higher agricultural production, chemical fertilizers help initially. But later, the cost of production keeps increasing, while actual production decreases. At the same time, the land loses its productive capacity permanently. Westerners have now realised this fact.

Indian Vision:

In India, agriculture is not looked upon as only a means of earning. Agriculture is not merely a matter of personal profit or loss. It is considered to be a lifeline for the whole of mankind. We consider society everlasting and accordingly regard agriculture as a sustainable system. To sustain agriculture forever is therefore our major task. This has been a special feature of our agriculture policy.

According to this approach, Indian agriculture has developed through the ages, and the productivity of our agricultural land has been preserved.

Blind Race for Progress:

For western agricultural scientists, this fact of Indian agriculture has remained a mystery. They cannot understand how the productivity of our agricultural land has been preserved. Today, America is the most developed nation in the world. But its history is of scarcely a few hundred years. In America, the motive of life is to maintain economic supremacy. They lack human concerns. That is why the motivation for every activity is to earn maximum profit. Because of this attitude, within a period of 250-300 years, the land in America has started losing its productivity. Food produced by using chemical fertilizers and pesticides has many hazards. It gives rise to new diseases. After experiencing these adverse effects, people in western countries are now resorting to organic farming. In India, instead of preserving our traditional, self-reliant, sustainable mode of agriculture, we are shifting to mechanized agriculture with high doses of chemical fertilizers and pesticides. Ironically we consider this to be a more progressive method!

Undemocratic and Parasitic Direction:

Even though India is a newly independent nation, it is certainly not a new country. Ours is the oldest civilization in the world. Many social, cultural and administrative systems were tried in our country. Our democratic system is also one of the oldest. Indian tradition holds that personal, social, economic and political interactions are integral parts of human life. This is the essence of Indian philosophy. Our traditional teachings tell us that social cooperation and complementary social interactions are the way for a peaceful social life. The self-reliance of each person in society is the basis of our democracy. And India had, in the past, practised such a system successfully.

The Pillars of Democracy:

In India, farmers are considered to be the backbone of our democracy. You will find that those who are not self-reliant cannot sustain democracy. That is why, in India, farmers have been recognized as the vanguards of democracy. And farmers have always been the majority in India. Farmers provide us with our food and will do so forever. Even today, they constitute more than 70% of our population. With this background, self-reliance for farmers is essential.

The agricultural policies followed in India after Independence did not make our farmers self-reliant, but instead made them more and more dependent on non-farming people. This not only weakened our democracy, but also adversely affected our agricultural process.

The Illusion of Mechanization:

Big landholders in our country are rapidly opting for mechanized farming. With this process, they usually face a scarcity of diesel every year during the harvest season. You will find them standing in queues at petrol stations for more than 10 days with their tractors, waiting for diesel. As a result, they cannot do justice to timely agricultural operation. Nowadays, a lot of agricultural work is carried out by machines. But our country does not have sufficient diesel for these machines. This diesel shortage is overcome by importing diesel with foreign loans. This policy has made our country totally dependent on foreign countries.

What Sort of Democracy is This?

Due to the high degree of mechanization in the agricultural sector, more and more agricultural labourers are being rendered unemployed. These unemployed labourers then migrate to the cities and increase the slum population. Those farmers who use mechanized farming methods are inevitably forced to use chemical fertilizers. These chemical fertilizers are manufactured by fertilizer companies. These companies are either owned by industrialists or the government. These companies require huge capital. In this system, even big farmers become more and more dependent upon the industrialist. On the other hand, the agricultural land is losing its production capacity. Diesel machines and tractors are polluting the atmosphere. This is the sorry state for big farmers in our country. One can imagine then, the condition of the small peasant, who form 3/4ths of the population. In such a situation, farmers cannot be self-reliant. In fact, in independent India, under the rule of our own democratic governments, our farmers are tied to a chain of dependency. This is certainly against the interest of our democratic society. Did the great martyrs of our freedom struggle expect this from us? Is it not a blow to our democracy?

Irrigation Management:

Irrigation management today is done through large canal systems. In this system, big farmers have always benefited, as they have all the resources to meet their own interests. But the irrigation needs of the small farmers are never fulfilled. They cannot get water for their crops in time. This irrigation system promotes corruption in the administration. In every instance, underhand dealings have become essential. The life of the poor has become miserable. Does this mean that our Independence is only for moneyed people? The need of the hour is to implement a local level irrigation system. This will make farmers self-reliant. The land will be irrigated in time and the underground water table will also be preserved.

Are Hybrid Seeds Beneficial?

Seeds play a vital role in agriculture. If fields are not sowed in time, then farmers lose half their work. In this modern technical era, tissue-culture and hybrid seeds are becoming more and more popular. Plant saplings grown out of tissue-culture are quite costly, and these plants can only be used for one crop. The same disadvantages apply to the use of hybrid seeds. This means that in the quest for high yields, farmers will become more and more dependent on big industrialists. In the process, industrialists will multiply their profits, but poor farmers will not get anything other than dependency. This is not good, either for our democracy or for agricultural production. That is why, in the interest of common people and our country, it is the need of the hour to work for self-reliance.

It is not very difficult to make arrangements to provide the best seeds to a group of villages. As these are not cross-breeds, farmers themselves can produce the seeds on their own. Deendayal Research Institute has successfully experimented with this technique through its Agricultural Science Centres.

Organic Fertilizers are the Best:

Organic fertilizers can be made popular in villages. Even small farmers can produce organic manure in a corner of their land with wormiculture. And these small farmers can become self-reliant even in terms of the use of manures.

Use of Cattle - Best for Agriculture:

The use of oxen for various agricultural operations in the fields is more scientific and less expensive. It also protects the productivity of the land. In the quest for immediate gains, big farmers are abandoning this conventional method. The long term effects of this change will prove to be hazardous. Cows and oxen survive on grass and the by-products of agriculture that are inedible for human consumption. In addition, cows and bullocks are captive factories of organic manures. Farmers can also use them without additional expense, for other agricultural activities. This is a dignified self-reliant method of agriculture. It will even reduce unemployment and preserve the production capacity of the land. Crops produced in this manner will be tastier and more nutritious. This process will provide farmers with an opportunity to lead a self-reliant, dignified life. Thus uneconomic holdings can be transformed into economic holdings.

Inhuman Political System:

Our rural sector is blessed by nature. But since Independence, the people of this country have been put under hardships, unemployment, poverty, migration and many other forms of injustice. There cannot be a more unjust system than this. It is a pity that in the name of democracy, all these things are going on, and the leaders of our country are only busy blaming each other.

Social Commitment - A Lack of Understanding:

The youth of our country are becoming more and more self-centred, chasing university degrees and highly paid jobs. They are not bothered about the problems of the people or of our country. Their parents are encouraging them in their self-centred direction. The behaviour of many of our political leaders, intellectuals, thinkers, writers and speakers is also no better than the common people. Even their children are not inspired by the semblance of social responsibility. As a result of this, in many sections of society, you cannot find even a spirit of social commitment. In such a situation, how can we expect a rebirth of our nation?

In our Democracy Peoples' Participation is Absent:

After Independence, elections were held on the basis of adult franchise. For the last 50 years, political leaders have convinced the people that they will solve all the problems of the country if they are given chance to be in power, and cater to all the requirements of the people. They never mention, that peoples' participation is required to do all this. That is why there is no chance for our new generation to ever feel the spirit of patriotism — They are never told that it is required.

Root of Uncontrolled Corruption:

In 1952, elections were first held in the country. Candidates of all political parties participated in the elections. Since then, election expenses have risen by leaps and bounds. Though the Election Commission has set a limit for election expenses, nobody adheres to it. The Election Commission has also been a silent spectator on expenditure violations by candidates. The intriguing question is, from where do such large sums of money come? We are all aware that this is black money. All successive governments were formed on the basis of this black money. In this scenerio, what can grow in this country other than corruption?

Right Way to Correct it:

This does not mean that we should be stuck in such a situation and let these shameless activities go on. There is a way to tackle this turbulent situation and that too by legitimate ways. To tackle this situation, we will have to move to rural India.

Peculiarities of Villagers:

Our villagers are still more empathetic than their urban counterparts. They can identify with the pains of others and try to help the needy. They still have a fear of immoral acts. They are still under the influence of faith

and devotion. They eagerly join in efforts where personal and social causes are achieved together. To establish a new social order, all these qualities are essential. There is another positive aspect. Most of the villagers are still far from the 'easy money' rat race and they still believe in earning their livelihood. They are honest and hardworking. These two qualities can help develop a fair, complementary social order. A self-reliant social system can blossom in such an atmosphere.

Need for Guidance:

A supposedly 'progressive thinking process' is now spreading in rural India. The traditional way of life and modern lifestyles are clashing against each other. Rural people are unable to choose between these two life patterns. This has slowed down the pace of social activity. This is why proper guidance is needed. Earlier, foreign rulers and officers used to look down on villagers. Our government officers are no different from them. Because of this high-handedness, the huge creative potential of the people has not been brought into use. If the rural population is encouraged with love and affection, rural society can be transformed into a prosperous society.

Social Architect couples of Deendayal Research Institute and agricultural scientists stay in the villages, along with the villagers. They participate in all the activities along with villagers. The villagers need this interaction.

Health:

If a person is not healthy in all senses, he cannot use the resources that are available to him. So, a self-reliant life pattern in the village can only be achieved if priority is given to the health needs of the villagers. To do this, health environment creation programmes were initiated during Diwali of the year previous to the launch of the campaign. The roads and lanes of all the eighty villages selected for the 1st Phase were cleaned. All the pot holes on the roads were filled up. Garbage dumps in or around villages decomposed during the rainy season. This created unhygienic conditions. All these dustbins were cleaned before Diwali. Domestic effluents

used to spill over the roads emitting foul odours. All these solid waste and effluents were collected in 4-5 pits in the village, and then spread in the fields every 4 days. Different species of useful trees are being planted around the villages. This will help oxygenate the air.

Arogyadham (Health Centre):

This Health Research Centre is located at Chitrakoot. With the use of Ayurveda, Yoga and Naturopathy, a lifelong health system is being developed there. Personal health, family health, and social health — a compact training program on these three issues is going to start shortly at the centre.

Life Long Health:

Objectively speaking, nature has created human beings in a manner that they can remain healthy throughout their lives. All other animals also have this benefit from nature. They do not need hospitals. But humans, in a lust for various material comforts, have adopted a lot of unnatural ways of living. It is the ego of humans that makes them try and conquer nature. But in the process, they have pushed themselves towards great dangers. Human society must come out of this vicious circle. Only then can it achieve peace. Arogyadham is working in this direction in rural areas.

In all the villages, the campaign has focused on ensuring lifelong health to all the children born after 26th January 2002.

Fifty percent of the diseases that are prevalent in the villages are due to unclean drinking water. The first task taken up was to provide clean drinking water in these eighty villages.

Counselling Centres for marriageable youth and newly married couples have also been started. In these villages, pregnant women are being given proper advice and counselling about pregancies, midwifery and children, which includes ideal parenting methods and diets for newborn babies.

As villagers do not get proper guidance about a healthy way of life from their childhood, they suffer from many diseases. A study was conducted that verified this fact.

Dadi Ma Ka Batua (Grandmothers' Medical Kit):

Traditionally, grandmothers in the family used to keep a medicinal pouch which used to contain various locally available medicines. She used them to cure ordinary ailments. They were treatments that evolved through experience. Arogyadham has prepared a medical kit of a similar type. Thirty three herbal medicines prepared in its *Rasashala* are used in this kit. All frequently occuring diseases can be treated by these medicines. All these medicines are prepared using available herbs and are very cheap. This medicinal kit has become very popular among the people of these villages. The direction for the use of these medicines is also given along with the kit in very simple language. Once this kit is in your hand, you need not go anywhere for the treatment of common illnesses. The poorest of the poor can also be self-sufficient. Socially aware persons in the villages have also been trained in the use of these medicines. They treat the patients in the village. Chronic and serious patients are sent to Arogyadham at Chitrakoot for further treatment.

Meals:

To keep oneself healthy and active one needs to eat daily. But nowadays, even our food has become a source of disease. Grains, vegetables and fruits produced using chemical fertilizers are a cause of concern. They may be attacked by bacteria. To control these bacteria, pesticides and insecticides are sprayed on these products. These poisons are then carried into the human body. As a result of this, the human body tends to develop many disorders. This has become a common phenomenon. Such food products are becoming a great hurdle in our campaign for self-reliance. To avoid this, special healthy food processes are being adopted. All the grains, vegetables and fruits are being produced using organic fertilizers. And if the crops still get infected, then an extract of neem leaves and 2% cow urine can be sprayed on them. This solution controls all types of infections. In fact, such crops give higher yield and better quality. Such products have higher nutritional value and taste.

This is the scientific method to protect crops. Even so-called 'developed' western countries, are now adopting these methods.

Crop Production:

Scientists from our Agricultural Science Centres are engaged in converting non-economic holdings into economic holdings. Poor farmers are also making an all-out effort to achieve self-reliant development. This has led to an agricultural surplus in the villages. These villages are now be able to supply their organic products to cities in limited amounts. In this way, self-reliant farmers are helping improve the health of urban citizens also.

Udyamita Vidyapeeth - Entrepreneur Training Centre:

Our Entrepreneur Training Centre *Udyamita Vidyapeeth,* guides the villages, as to which of the farm products can be sold in urban centres. This gives farmers an opportunity to earn additional economic benefits. All these healthy organic products are supplied in safety packs. The packing methods is taught in Udyamita Vidhyapeeth. In this way, an interdependent system between villages and cities has been established. There is no supply of such health products in the cities. This shortcoming will has been overcome through the programme conducted by Udyamita Vidhyapeeth. On one hand, this programme has provided healthy agricultural products, produced using organic fertilizers, to citizens in urban areas. And on the other hand, lots of employment opportunities has been generated in rural areas. Thus, self-reliance is achieved.

In the forests, lots of materials that are commonly used in the cities are available. Illiterate, simple tribals are exploited for such forest products by industrialists. As a result of this, villagers and tribals, once rich from such resources, are now in a very miserable state. To eradicate such misery, Udyamita Vidhyapeeth has trained villagers and tribals to become self-reliant. Samaj Shilpi Dampati (Social Architect couples) play a very important role in this programme.

Useful herbs that are naturally available in the forests are being semi and fully processed by local tribals, so that they can be sent to the cities. For this process, the required skills are being taught to the tribals by Udyamita Vidhyapeeth. This helps these tribals to become self-reliant.

Our rural areas are full of natural resources. But tribals are unaware of how to use these resources. Udyamita Vidhyapeeth strengthening the tribals in this respect.

Wealth from Livestock:

In the rural areas, there are many types of useful livestock. Villagers can greatly benefit from them. Today, villagers are simply playing the role of shepherds. If they are taught various methods of producing livestock products, then they can improve their economic earnings. This will also benefit our citizens in many ways. New interdependent social systems between villages and towns can be evolved.

The quality of livestock breeds is deteriorating. This problem has to be tackled immediately. It is a great loss to our country. Our national leadership has no time to look into these rural problems. In this campaign for self-reliance, we will be raising the quality of sheep and goats in the villages. The best available steer of these species has been provided at most of the village cluster centres. Udyamita Vidhyapeeth will try to develop various processes to use all the available livestock products.

Goal of Educational and Social Reconstruction:

Our established educational systems have become career factories. This has led to a generation of self-centred and consumer-oriented people. The only motive of every person has become to earn the maximum amount of money. The craze for ever-larger dowries has now become limitless, due to which newly married girls are put through such great atrocities that they commit suicide. Most of the people who force the girls to commit suicide are educated. Why is our existing educational system making us inhuman? *Sarve Bhavantu Sukhinah...* 'Where let all live happily ..' was the ideal of our culture. So how, on our holy land, are our youth becoming so inhuman? Is it due to the educational system? Nobody seems bothered about this issue.

The British turned our teachers, who were our *Gurujan* into salary earners. Their need was to have obedient employees rather than nation-builders. Since Independence, there has been no effort to make our teachers responsible for developing the new generation into the pillars of our national life.

Deendayal Research Institute, instead of entering into undue controversies, has decided to develop an essential educational system. The human body is an integrated form of body, mind, intellect and soul. Pandit Deendayalji highlighted this fact. But this was not practised. All these basic elements are known to be inspiring forces of the body and soul. The mind and the intellect are their disciples.

The basic elements of the body and soul work in different directions. The body is an element of consumption. It tries to accumulate more and more in its possession though it cannot consume it fully.

But the tendency of the soul is totally different. It gets hurt with the sorrow of others. It always tries to comfort others. It inspires human beings to help others, rather than accumulate material goods. It develops compassion in human beings. To achieve a perfect balance between these two totally opposing tendencies, education is essential. This should be the goal of education But this basic motive has been lost.

The personality development of children begins at an early age in our homes. This is the preliminary process of education. But during this period, the proper educational direction is lost. After this, the child enters a school. In the existing education systems, various subjects are taught that only help in acquiring degrees. The humanitarian development of the students is overlooked in the school. Even the teaching staff in the schools do not appear to be aware of the goal of education.

Objectively speaking, unless a complementary atmosphere is created in schools, families and society, a new generation of children cannot be developed in a 'discrimination free' social atmosphere. Only when this happens, will these children be able to identify with the sorrow and happiness of the people. But due to the lack of this atmosphere in family, in school and in society, the new generation will not have the chance to develop the feeling of social commitment.

In Swarajya, Teachers have Become mere Employees:

After Independence, many commissions were set up to reorganise our educational systems. Sufficient money was spent on them. But many good suggestions were not adopted. Why? This is an unanswered question.

Children from various social strata come together in the school classroom. Their levels of understanding are not the same. All of them should be developed to be the citizens of country. This is the responsibility of teachers. As they are the guardians of these students, teachers should make these students into architects of the nation.

But even after Independence, these teachers are not free to exercise their own judgement in the use of different methods for teaching students from different social and cultural backgrounds. They are compelled to complete the prescribed curriculum. Their promotion depends on it. They are only employees. In this situation, it is quite obvious that in place of a spirit of nationality, only individualism will be developed.

Sixty-three years after Independence, we are still in a precarious educational atmosphere. The results of this educational system have to be critically evaluated. They don't feel as part of our society or our country. In this situation, who will build the future of the country?

Innovative Attempts:

The late Pandit Deendayal Upadhyaya had thought over this issue. According to his thoughts, Deendayal Research Institute is trying to develop a model educational system. The children of the villages in the Self-Reliance Campaign area are learning in our schools. Work has been carried out among these students. Efforts are on to make these students self-reliant and encourage them for active involvement in social life. Efforts are being made to seek the cooperation of the teachers. With this intention, special efforts have also been made to involve the teacher community in this mission. Our effort has been to develop the potential of these students as social beings. Some of these upcoming citizens have been inspired to spend at least one hour each day for a cause of the people, family or society. This has helped them to develop an ability to work on a practical level and they will have an integrated feel for society. Appropriate work programmes have been being designed. Teachers have also been encouraged to work with their students and guide them.

The educational tradition in India was the *Gurukul* system. In this system, not only were students taught various subjects and rituals, but they were also required to do all the domestic work. Their overall development was achieved. They were trained in social cooperation. There was no scope for self-centred thinking.

Children of all social stratas used to learn in one *Gurukul*. The story of Krishna and Sudama is an example of this tradition. The result of this practice was that social unity and integrity was maintained. There was no scope for a self-centered or separatist way of life. The whole population used to live like a single family. Value systems of life remained unabated. This was the great benefit of our older educational systems. But in independent India, our leaders choose special schools for their children. They arrange cars for their children to go to and come back from their schools. These children do not come into contact with common children. Is this the right educational system?

Foreign rulers, especially the British, adversely affected our educational systems. Their policy was 'divide and rule'. The ruled always blindly follow the rulers. The English rulers started separate schools for their children. Many of the then landlords also started separate schools for their own children. And slowly a process of separate schools for every caste and religion started. In this land of *Gurukuls,* where schools were a medium for social unity and integrity, a new trend of schools emerged. And that gave rise to social disintegration.

The existing educational system promotes separation and self-centredness among children from an early age. Public schools are considered to be good educational centres. To teach children in such costly schools has become a status symbol. Children of rulers, administrators and the influential class study in such schools. That is why, to expect the current state to transform this anti-social education system, is like running after a dream.

It is a great relief that rural schools are still not affected by this anti-social tendency of separate schools. The need is for teachers to be made aware of their responsibilities. This task can only be fulfilled through close dialogue with teachers, and not by dictats.

The men and women involved in teaching are the true nation builders. Our old traditions have proved this fact. Social values are inculcated in children by these men and women. *Sarvabhut Hiteratah* 'Well-being of all' was the message given by our great teachers.

Humans cannot live alone. The family in which a human is born also cannot live in isolation. Small and big societies are the basis of a human being's existence. Rishis and Munis who were involved in education highlighted this fact. The motivation of 'Well-being of all', gave rise to social cooperation and social amity. This made the whole society happy. This was not promoted by any ruler, but was part of the educational thought process that inspired it.

In the current social system, unless teachers adopt our traditional values and take up the task of implementing them, the spirit of social life cannot be revived in our society. The spirit of patriotism will not be revived in the new generation. Our rural society is the most favoured section to start this noble work.

Family life:

Family life is the source of human values. This is a proven fact of Indian tradition. Whilst our family value system was practised, our society continuously progressed. Whenever social values were neglected, our social life became turbulent. This is a historical fact. Families, through their offspring, maintain an eternal continuity in society. But this is not a mechanical process. This is our eternal duty. This is a sacred rite of development for a person, family and society. Reviving this tradition is the need of the hour. This the basis of self-reliance.

The Teachers (*Gurujan*):

Teachers *(Gurujan)* are the guides for every person, family, nation and the universe. When the ability of teachers to guide is preserved, moral coordination and harmony in the state's management, commerce, social life and family life is maintained. Otherwise dishonesty, disorder and corruption grows. They are the guardians and guides of each new generation of society. Good or bad tendencies can originate from them. Schools are the root source of this and the teachers are the controllers of the schools. Family members, administrators, rulers, thinkers, writers, editors were all educated by teachers. Unfortunately, this task was overlooked after

Independence. For Deendayal Research Institute, this is one of our most important tasks. To fulfill this task in the rural areas is slightly easier. That is why this programme was initiated in the 512 selected villages. In all these villages, no person below the age of 40 years is to remain illiterate. The meaning of education is not only literacy, but also understanding human society. Various disputes in the village can be resolved through dialogue instead of going to the courts. This was our tradition. This practice has been revived.

Balodyan:

'Children are the provident fund of society' - this sentence has become a catchy slogan of every leader. But the precarious and malnourished state of children in the rural areas is beyond the imagination of people in urban areas.

Though villages are located in the backyard of natural resources, they have today become centres of solid wastes. The children are growing up in a very unhealthy atmosphere. But who cares for this provident fund of the nation? The development of these children is the basis of *Balodyan.*

Children love playing. Entertainment and educational parks have been developed in every village. A model of the Balodyan, Nanhi Duniya, has been developed at Chitrakoot.

Information:

There are various events that take place around the world that affect our lives. But villagers are unaware of them. Deendayal Research Institute feels it is essential that all the useful and important information be given to villagers from time to time. For this purpose, a huge blackboard has been placed at a central location in the villages. Important information is provided in bold letters on these boards. This allows villagers to access important information which could be useful for them.

Gramodaya Fund:

Under the village self-reliance programme, every step is designed to make villages self-sufficient. For this, it is essential to make an arrangement for the villagers to work on their own in this direction. That is the purpose of the Gramodaya Fund, that has been created in every village cluster.

Every family contributes to the Gramodaya Box (which is with every family) according to their capacity. Even the poorest of the poor contributes at least a handful of grain to this box. This act impresses upon the children of the family the importance of social commitments. Isolation from society is not in the interests of a person, family or society at large. The Gramodaya Fund integrates every member of the family to society. The happiness of an individual and of society is inseparable. This is being experienced by everyone.

Expectations from Parliamentarians:

The process of development moves from the bottom towards the top. Rural societies are the root of our nation. That is why our development process should begin from rural areas.

Parliamentarians from rural areas can initiate a process of development in their respective constituencies, using different methods and peoples' participation. This will pave the way for the prosperity of our nation:

1) Proceedings in the *Lok Sabha* and *Rajya Sabha* can be changed to a more constructive form.

2) Assemblies in our States, Metropolitan Councils, Civic bodies, District *Panchayats* and Village *Panchayats* can be guided in a more constructive manner.

3) The State and Administration can become more people-oriented.

4) Corruption can be controlled.

5) This will impart a new constructive vision to our future generation.

6) This will eliminate self-centredness from individuals and families as well as reduce casteism and sectarianism in our society. Our society will become more united.

7) This will provide an opportunity to control malpractices, tyranny and violence in our society.

With these expectations, Deendayal Research Institute has started this campaign for self-reliance.

|| **Vande Mataram** ||

PART II
AN OVERVIEW OF THE SELF-RELIANCE CAMPAIGN

The Self-Reliance Campaign

MISSION

* We do not stand for ourselves but for our kith and kin; our kith and kin are those who are oppressed and neglected

PURPOSE

* To bring about total transformation and development of society through designing and implementing a framework to achieve and sustain self-reliance in villages through the initiative, involvement and empowerment of the villagers with replicable, definable and tangible parameters

VISION

500 Self Reliant Villages by 15th August 2010

FIRST LEVEL MILESTONE

80 Self Reliant Villages by 15th August 2005

QUALITY POLICY

Our Quality Policy is to achieve self-reliant villages by -

* Wiping out poverty, unemployment & illiteracy
* Ensuring life long health
* Creating dispute free, clean & green environment

This will be achieved through villagers' initiative & performance

GOAL

Self-reliance of 80 villages by 15th August 2005
Self-reliance of 500 villages by 15th August 2010
Thereafter replicate in other parts of India

ACHIEVED THROUGH

* Research & Refinement
* Planning & Implementation of Systems
* Dissemination of Appropriate Technology
* Involvement & Commitment of competent people

Vision Attributes of DRI – Definition & Measurement

POVERTY

Definition: The family that cannot fulfill its basic needs.
Measurement:

- An income below Rs. 18,000 per annum. (5-7 family members).

UNEMPLOYMENT

Definition: A person between the ages of 18 to 35 (not pursuing higher education) who does not have any work for income generation to fulfill his needs is unemployed.
Measurement:

- Number of persons between the ages of 18 to 35 years old (not pursuing education) who do not have any work for income generation (Should be employed 180 days out of 365 days).

ILLITERACY *(Ashiksha)*

Definition: A person who is not able to read, write and understand his responsibilities and does not even have decision-making powers.
Measurement:

- Age group of (boys/girls) of 6 to 14 years should have school education.
- The family should be aware of the scenario of the village.
- A representative of the family should participate in *gram sabha* meetings.
- Age group of 15-35 should be able to read and write through adult education.

GOOD HEALTH

Definition: A person who willingly performs the responsibilities of family, society and the nation on the basis of physical and mental abilities. A person who is physically and mentally fit.
Measurement:

- Number of patients suffering from chronic disease.
- Number of infants suffering form malnutrition.
- Vaccination.
- Mortality rate.
- Birth rate and death rate.
- Number of families with access to pure drinking water.
- Number of families aware about family planning.

CLEAN AND GREEN

Definition:

- Management of the home and its surroundings.
- Management of domestic animals and their waste material.
- To make the rural people aware of strictly avoiding using the roadside as a latrine.
- To prepare soak-pits for avoiding the accumulation of water.
- Should have a nutritional/kitchen garden.
- Plantation of multi-purpose trees.
- Cleanliness of common facilities.
- Encroachment free village.

Measurement:

- After establishing the number of animals in a family, to find out the availability of compost pits.
- Drainage/Soak Pit system is available or not.
- Cleanliness of the houses and nearby areas.
- In every village there must be the signboard, which contains points related to cleanliness.
- There should also be wall writing that contains slogans, quotes.
- A system of latrines to be evolved by the villagers themselves according to their local situation.
- Nutritional/kitchen garden and *Tulsi* at every home and ***panchvati*** (Pipal, Banyan, Neem, Anola, Ber) in every village.
- Village roads and lanes should be maintained.

DISPUTE IN THE VILLAGE

Definition: Such cases that are registered with the *panchayat*, in police station and courts.

Measurement:

- Number of cases registered in the *Panchayat*.
- Number of registered cases (police stations and courts).
- Registration of new cases.

SELF-RELIANT FAMILY

Definition:

Sai itna dejiye jame kutumb samay.
Main bhi bhukha na rahu, atithi na bhukha jaye.

- Family should have the basic needs met.
- Family should be saving a part of income.

Measurement:

- Family should be healthy and free from disease.
- Income should be at least Rs. 18,000-24,000 per annum.
- The family should save a minimum of Rs. 2,000-3,000 per annum.
- Every house should have a ***tulsi*** plant**.**
- Age group of 06-14 yrs (boys/girls) should have school education.

PROSPEROUS FAMILY

Definition:

- Educated family.
- Social recognition.
- Moral values.

Measurement:

- All able-bodied members of the family should be employed.
- Family should be aware and be knowledgeable about the village scenario.
- At least one member of the family should be a Graduate.
- Age group of (boys/girls) of 6-14 yrs should have High School education.
- The family should be in a position to give employment opportunities to others as well.
- The family should save at least Rs. 7,000-10,000 per annum.

PUBLIC AMENITIES:

Definition:

Facilitation and assistance to create public amenities and awareness creation for maintenance of available common facilities, such as:

a. Playground
b. School
c. Panchayat bhavan
d. Shrudha Kendra (Place of worship)
e. Wells
f. Ponds
g. Hand pumps
h. Latrines
i. Post office
j. Primary health centre
k. Bank
l. Telephone exchange
m. Electrical facility
n. Library
o. Roads and lanes

Measurement: Maintenance of the following available facilities such as:

1. Playground
2. School
3. Panchayat bhavan
4. Shrudha Kendra
5. Wells
6. Ponds
7. Hand pumps
8. Latrines
9. Post office
10. Primary health centre
11. Bank
12. Telephone exchange
13. Electrical facility
14. Library
15. Roads and lanes

SOCIAL CONSCIOUSNESS:

Definition:

A society in which the people are aware and conscious about their social duties, and do not rely blindly on others.

Measurement:

- Number of encroachments
- Number of child marriages
- Number of dowry cases
- Number of child labourers
- Number of divorce cases
- Number of religious disputes
- Number of widow marriages [Additions (+ve)]
- Number of bonded labour [Reduction (-ve)]
- Number of community based functions
- Number of families believing in superstitions
- Participation level in moments of joy and sorrow *(Sukh aur Dukh me Samuhik bhagedari)*

SELF-RELIANT VILLAGE

Definition:

The village that is pollution-free, living in harmony, with no family below the poverty line, minimum chronic diseases, no unemployment, minimum encroachment, an approach road, properly arranged village roads and lanes, schooling facilities, pure drinking water facilities, irrigation facilities, no disputes, proper utilization of natural resources, health facilities *(Dadi ma ka batua),* clean and green, maintained public amenities, minimum malnutrition, minimum birth and death rate.

Measurement:

- Every family will have its own house
- No unemployed rural youth
- Pure drinking water facilities for the village
- Management of the wasteland must be developed
- Approach road is available or not
- Campaign for roadside plantation
- Village road and lanes should be maintained
- Houses and surroundings should be neat and clean
- Village should have at least a primary school
- Public amenities should be maintained
- Dispute-free village
- Village development committee (health committee, education committee, etc.) should be functional
- Increasing ratio of Agricultural production
- Extent of *Dadi-Ma-Ka-Batua's* popularity
- The family income should be at least Rs. 18,000 per annum
- 6-14 yrs boys and girls should have education
- Village is clean and green
- Organic farming is encouraged
- Orchard is maintained

OUTPUT OF DRI TO MEET VISION PARAMETERS

POVERTY:

Sr. No.	Output	Department
1.	Identify landless labour & arrangement for their self employment.	KVK
2.	Value addition of available natural resources.	UV & Rasshala
3.	Provide facility to open poultry/goat rearing/ piggery/fishery.	KVK
4.	Employment for disabled persons.	UV
5.	Internet/e-marketing.	UV
6.	Motivation for population control.	SSD
7.	Create a model for taking govt. fund for housing to the 'homeless' & provide low cost building material technology for housing.	SSD

UNEMPLOYMENT:

Sr. No.	Output	Department
1.	Promote need-based industries in villages.	UV
2.	One village – one product.	UV
3.	Flower cultivation.	KVK
4.	Promote traditional professions (like pottery, carpentry).	UV
5.	Promote small-scale industries.	UV
6.	Make villagers aware of benefits of keeping cattle.	Goshala & KVK
7.	Develop co-operatives for dairy products.	KVK
8.	Scale up 2.5 and 1.5 acre models.	KVK
9.	Formation of Collection Centres for raw materials.	UV, Rasshala
10.	To increase the yield per acre of land.	KVK
11.	SHG formation.	UV, KVK, SSD
12.	Seed collection (seed club).	KVK

ILLITERACY:

Sr. No.	Output	Department
1.	Awareness creation for illiteracy.	ERC & Schools
2.	Motivate educated youth to educate illiterates.	SSD
3.	Listing of school dropouts.	SSD
4.	Monitoring of Govt. schemes	SSD
5.	Motivation of talented students.	ERC & Schools
6.	Display the pictures of award winning students.	ERC
7.	Play and learn (*khel-khel mein*).	ERC
8.	Formation of educational committee.	SSD, ERC
9.	Conduct *shivir/gosthi*.	ERC & Schools
10.	Make adult education popular.	SSD
11	Motivate villagers to save.	SSD

GOOD HEALTH:-

Sr. No.	Output	Department
1.	Health awareness programmes (incl. pure water drinking).	Arogyadham & SSD
2.	Implementation of village health programmes.	Arogyadham
3.	Implementation of *Dadi Ma Ka Batua.*	Rasshala,SSD & Arogyadham
4.	Formation of health clubs.	SSD
5.	To popularize the mobile health centre.	Arogyadham
6.	Arrangement of health centres.	Arogyadham
7.	To improve and standardize the quality of Ayurvedic Medicines.	Arogyadham
8.	Identification and examination of Traditional Medicines.	Arogyadham
9.	Development of model nurseries of medicinal plants in rural areas.	Arogyadham & KVK
10.	Training of midwives.	Arogyadham
11.	Conduct health competitions.	Arogyadham & SSD
12.	Organize Ayurveda, yoga and naturopathy camps.	Arogyadham
13.	School health programmes.	Arogyadham & SSD
14.	Purification of water.	SSD, KVK & Arogyadham
15.	Development of live blood bank.	Arogyadham
16.	Treatment of animals.	KVK & Goshala

CLEAN AND GREEN:

Sr. No.	Output	Department
1.	Awareness of villagers for plantation of multi purpose trees. *Guduchi* and *Tulsi* plant for every house.	KVK
2.	Training through: a. Signboard (about cleanliness slogans and quotes) – in entry point and common places of the village. b. Wall writing for cleanliness. c. Encourage villagers to commemorate occasions (like birthday, marriage anniversary, etc.) by planting trees.	KVK, Samaj Shilpi Dampati
4.	Trained villagers to set up kitchen garden for vegetable consumption purposes.	KVK
5.	Train villagers to manage wastes.	KVK
6.	Build approach road, village roads and lanes with people's involvement.	SSD
7.	Show audio-visual aids related to cleanliness.	ERC
8.	Development of nurseries.	KVK
9.	Prepare a model for sanitation and drainage system.	UV
10.	Conduct campaigns for clean and green.	SSD, ERC & Schools

NO DISPUTE:

Sr. No.	Output	Department
1.	Identify and solve registered dispute cases.	SSD
2.	Conduct cultural activities & teach social values.	ERC& Schools Ram Darshan
3.	Tell success stories.	SSD
4.	*Satsang (astha se jodna)*	SSD
5.	Motivate the people to take up constructive activities	Project heads of DRI + SSD
6.	Encourage villagers to withdraw their old cases lying in the court by mutual settlement.	DRI HQ + SSD
7.	Identify *'Sarvamanya Vyakti'* (reputed/influential person) in villages to monitor and resolve disputes.	SSD & DRI HQ
8.	Form groups to monitor and resolve disputes.	SSD
9.	Identify roots of disputes and eradicate them.	SSD

PROSPEROUS FAMILY:

Sr. No.	Output	Department
1.	Awareness creation about the benefits of keeping cattle *(Pashu Dhan)*.	KVK
2.	Provide new farming technology.	KVK
3.	Encourage villagers to cultivate medicinal plants.	KVK
4.	Motivate villagers to go for higher education.	ERC
5.	Encourage retired persons to participate in Village Development Activities.	SSD
6.	Request visitors to share their time and experience for constructive work.	SSD
7.	Associate with affluent people in the village to share their resources for 'self-reliance'.	KVK
8.	Encourage prosperous family to contribute money for village development.	DRI HQ
9	Implementation of seed village.	KVK
10	Implementation of 1.5 & 2.5 acre models.	KVK

Methodology

Deendayal Research Institute volunteers conducted a Participatory Rural Appraisal (PRA) in all the 516 villages selected in the Self-Reliance Campaign, to understand the real needs of the villagers, and to identify the major problems and constraints of the poorest of the poor, as also the socio-economic condition of the village. The detailed family survey of all the families was conducted in order to understand individual family socio-economic conditions. This data helped give possible solutions to the problems and to address the needs of the families.

Most of the selected villages under the Self-Reliance Campaign fall in the Bundelkhand region, characterized by its backwardness and the lowest per capita income in the country. This is mainly due to rain-fed agriculture, lack of income generating enterprises, high illiteracy rates and social constraints like *arra pratha* and criminal gangs.

In the following pages we give templates of the various data collection tools used and also the Action Plan.

Participatory Rural Appraisal (PRA)

The process for conductting a Participatory Rural Appraisal (PRA), the basic tool for any rural development programme if given below.

Participatory Rural Appraisal (PRA)

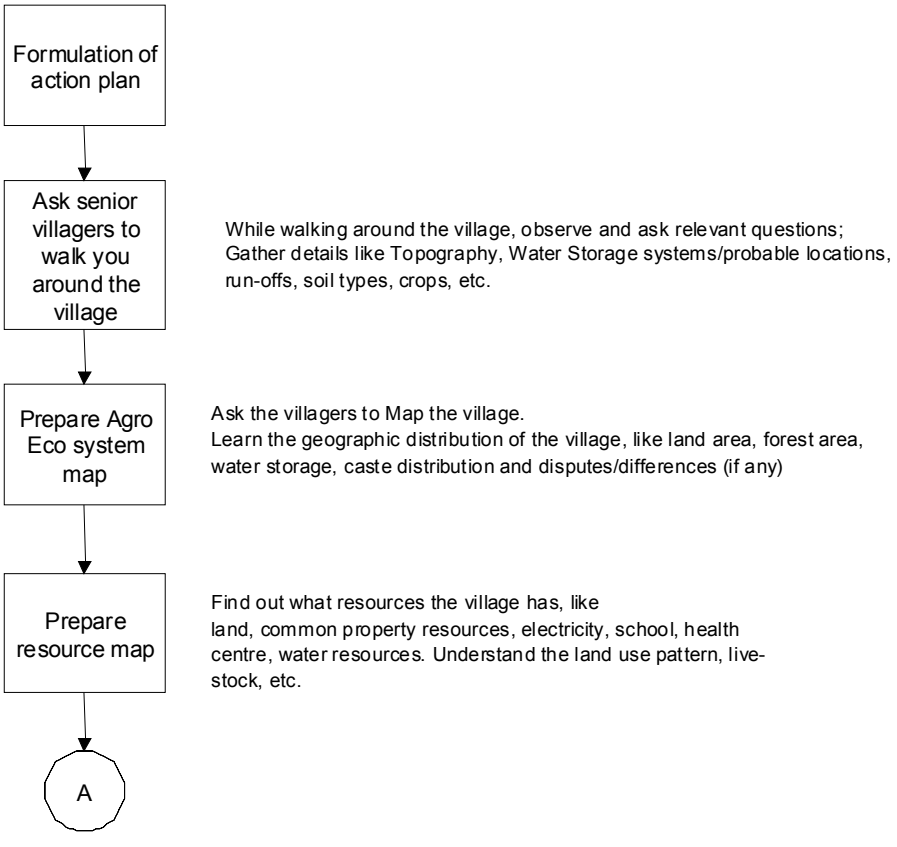
Since independence, rural development schemes were discussed and formulated at the District, State and National level without the participation of rural people. This ignored core local issues and the requirements of the particular area. As a result, these cost-intensive rural development schemes were unable to achieve their objectives.

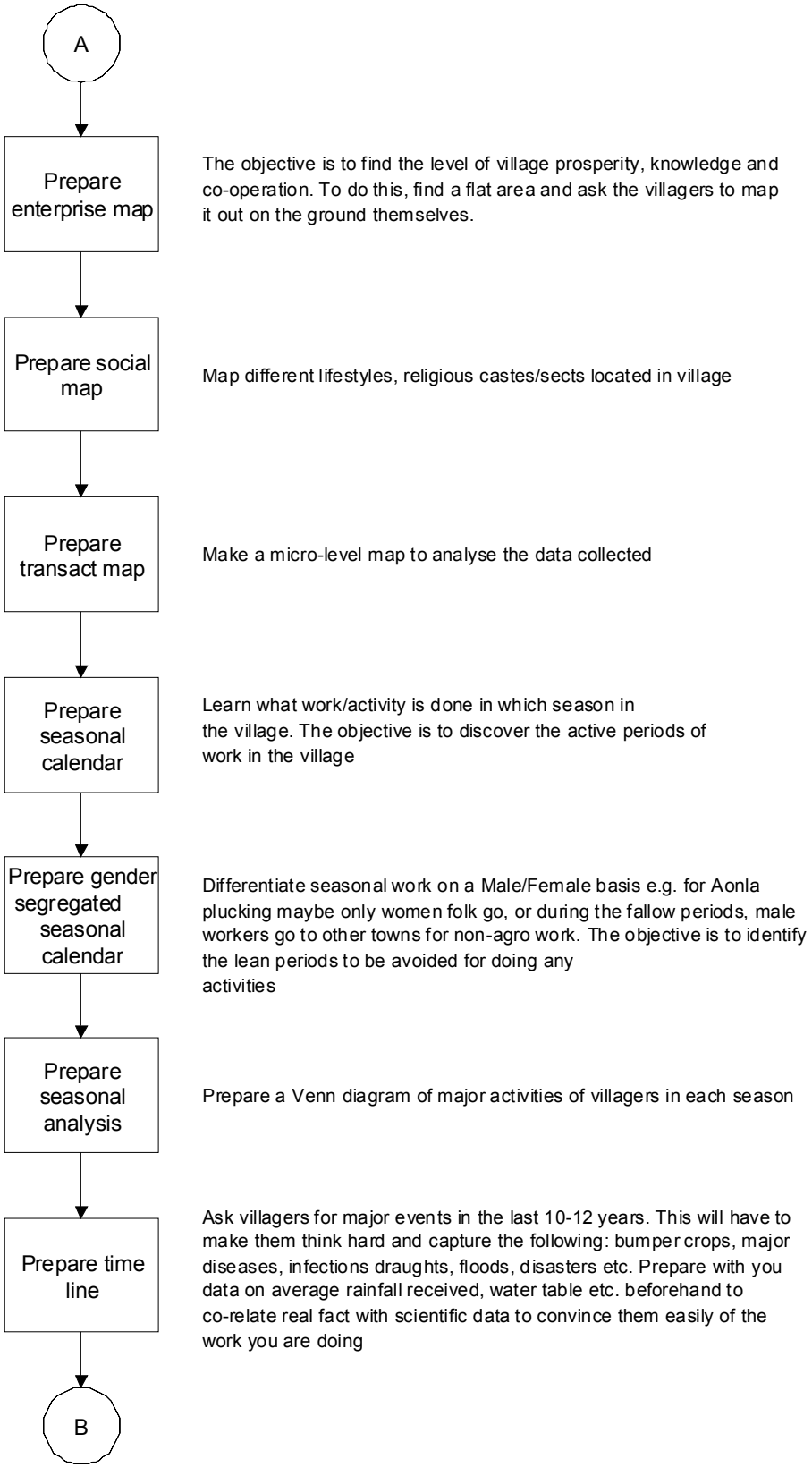
After planners and policy makers realized the shortcomings of this type of planning, they resolved to compulsorily enlist the participation of the people involved in the developmental schemes being carried out in their villages through a Participatory Rural Appraisal (PRA). This procedure, which has now become the key document for any rural developmental work, ensures the people's understanding of their problems and helps in devising solutions that can be implemented by them. People's participation in rural projects increases their scope, stability and success rate.

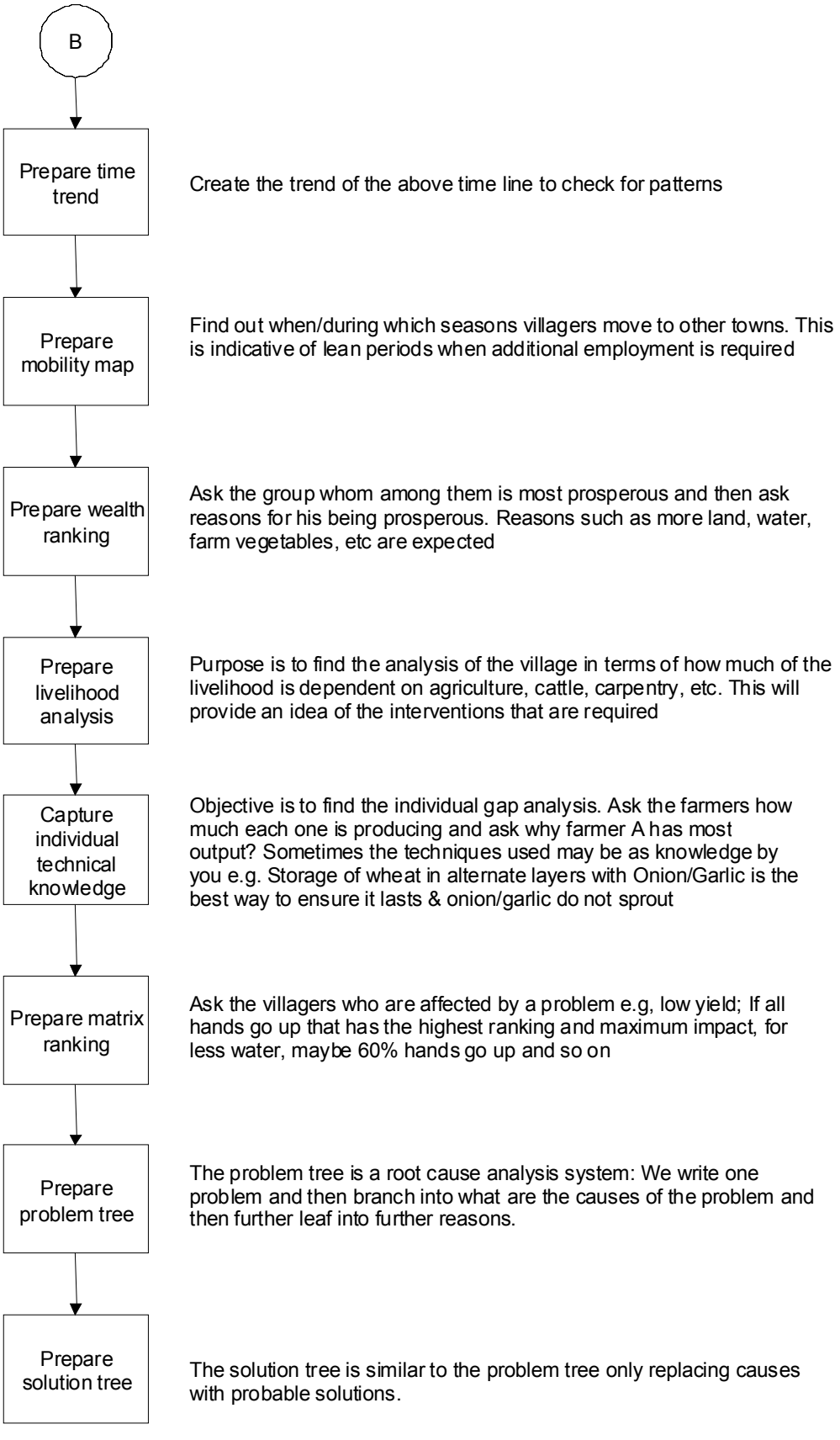
Such rural participatory programs succeed in bringing all sections of society including women and landless labourers, to a common meeting ground, where villagers are apprised of their problems; educated about the rural development project, and their need for the project to alleviate their problems. This further ensures a surge of voluntary participation by them.

The objective of the PRA is to gain the confidence of the villagers, who will then divulge basic information regarding local conditions relating to farming, schools, wells, ponds, flora & fauna, roads, forests, and a variety of other data that can help in devising solutions to their problems.

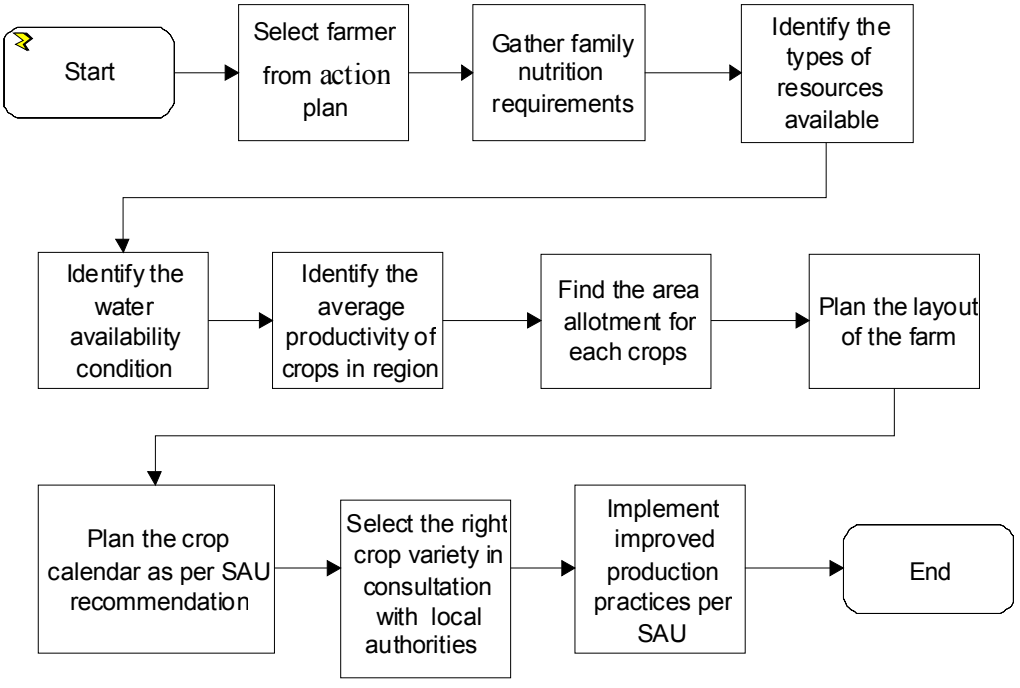
Process to conduct PRA




A
Prepare enterprise map
The objective is to find the level of village prosperity, knowledge and co-operation. To do this, find a flat area and ask the villagers to map it out on the ground themselves.
Prepare social map
Map different lifestyles, religious castes/sects located in village
Prepare transact map
Make a micro-level map to analyse the data collected
Prepare seasonal calendar
Learn what work/activity is done in which season in the village. The objective is to discover the active periods of work in the village
Prepare gender segregated seasonal calendar
Differentiate seasonal work on a Male/Female basis e.g. for Aonla plucking maybe only women folk go, or during the fallow periods, male workers go to other towns for non-agro work. The objective is to identify the lean periods to be avoided for doing any activities
Prepare seasonal analysis
Prepare a Venn diagram of major activities of villagers in each season
Prepare time line
Ask villagers for major events in the last 10-12 years. This will have to make them think hard and capture the following: bumper crops, major diseases, infections draughts, floods, disasters etc. Prepare with you data on average rainfall received, water table etc. beforehand to co-relate real fact with scientific data to convince them easily of the work you are doing
B


B
Prepare time trend
Create the trend of the above time line to check for patterns
Prepare mobility map
Find out when/during which seasons villagers move to other towns. This is indicative of lean periods when additional employment is required
Prepare wealth ranking
Ask the group whom among them is most prosperous and then ask reasons for his being prosperous. Reasons such as more land, water, farm vegetables, etc are expected
Prepare livelihood analysis
Purpose is to find the analysis of the village in terms of how much of the livelihood is dependent on agriculture, cattle, carpentry, etc. This will provide an idea of the interventions that are required
Capture individual technical knowledge
Objective is to find the individual gap analysis. Ask the farmers how much each one is producing and ask why farmer A has most output? Sometimes the techniques used may be as knowledge by you e.g. Storage of wheat in alternate layers with Onion/Garlic is the best way to ensure it lasts & onion/garlic do not sprout
Prepare matrix ranking
Ask the villagers who are affected by a problem e.g, low yield; If all hands go up that has the highest ranking and maximum impact, for less water, maybe 60% hands go up and so on
Prepare problem tree
The problem tree is a root cause analysis system: We write one problem and then branch into what are the causes of the problem and then further leaf into further reasons.
Prepare solution tree
The solution tree is similar to the problem tree only replacing causes with probable solutions.

Sample Process



Questionnaire for Village Survey

Survey Done On (Date):

1	**Name of village**
a	Block
b	Panchayat
c	Tehsil
d	District
e	State

2	**Population**
(i)	Total Family
(ii)	Total Members
a	Man
b	Woman
c	Child
d	Female Child
e	S.C.
f	S.T.
g	O.B.C.
h	General
i	Religion
(i)	Hindu
(ii)	Muslim
(iii)	Christian
(iv)	Other

3	**No. of Farm Families**
a	Big (Landholding > 5 Hectare)
b	Small (Landholding 1-5 Hectare)
c	Marginal (Upto 1 Hectare)
d	Landless

4	**No. of Families Possessing**
a	Huts
b	Kacha (Earthen House)
c	Pakka (Brick House)
d	Kacha/Pakka

5 Availability of Approach Roads and Internal Lanes and Condition

Approach Roads	Yes ☐	No ☐	
No. of Approach Roads			
Condition of Approach Roads	Good	Bad	Remarks
Internal Lanes	Yes ☐	No ☐	
No. of Internal Lanes			
Condition of Internal Lanes	Good	Bad	Remarks

6 Availability of Infrastructure

a	School				
(i)	Primary School (Upto 5th Standard) Distance From Village km.	Yes ☐	No ☐		
(ii)	Junior School (6th to 8th Standard) Distance From Village km.	Yes ☐	No ☐		
(iii)	High School (9th to 10th Standard) Distance From Village km.	Yes ☐	No ☐		
(iv)	Intermediate School (10+2) Distance From Village km.	Yes ☐	No ☐		
(v)	Other (like Anganwadi, Shiksha Guarantee Scheme, etc.)				
b	No. of Students				
(i)	Boys				
(ii)	Girls				
c	Playground	Yes ☐	No ☐	Remarks	
d	Panchayat Bhavan	Yes ☐	No ☐	Remarks	
e	Sharda Kendra (Place of Worship)	Yes ☐	No ☐	km	
f	Post Office	Yes ☐	No ☐	km	
g	Health Facility (General Practitioners)	Yes ☐	No ☐	km	
h	Primary Health Centre	Yes ☐	No ☐		
i	Bank	Yes ☐	No ☐	km	
j	Electrical Connection	Yes ☐	No ☐		
k	Source of Drinking Water	Yes ☐	No ☐		
(i)	No. of Wells				
(ii)	No. of Ponds				
(iii)	No. of Hand Pumps				
(iv)	No. of Tube Wells				

7 Other educational facilities and type (like anganwadi, shiksha guarantee, etc.)

a	No. of Anganwadi
b	No. of Shiksha Guarantee

8 Type of drainage system

a	Earthen Drain
b	Masonry Drain
c	No. of Soak Pits

9 Average Crop Productivity

Sr. No	Crops	Area Under Crops (acre)	Production (Quintal/acre)
1	Sorghum		
2 Pea	Pigeon		
3	Paddy		
4	Wheat		

10 No. of BPL (Below Poverty Line) Families (Income Less Than Rs. 1,500 per Month)

11 No. of Traditional Occupations

a Barber
b Pottery
c Shoe Maker
d Carpentry
e Folklore Medicine (Traditional Medicine)

12 No. of Boys and Girls (5 to 14 years) Who Do Not Go To School

a Boys
b Girls

13 No. of Orchards/Plants

14 No. of Nutritional Kitchen Gardens

15 Irrigation Facilities Available

a Canal
b Tube Well/Bore Well
c Ponds
d River
e Well

16 No. of animals

Sr. No.	Animals	Number		Breed	
1	Cattle				
2	Buffalo				
3	Goat				
4	Sheep				
5	Pig				
6	Poultry				
7	Bullocks				
8	Fisheries				
9	Other				

17 Transportation facility

a Tractor
b Car/Jeep
c Motorcycle/Scooter
d Cycle
e Bulock Cart
f Truck

18 **Availability of panchavati Trees** Yes No If yes, how many

a Pipal
b Banyan
c Mango
d Aonla
e Bel

19 **No. of Families Using Organic Manure**

a Fully (Area in Acres)
b Partially (Area in Acres)

20 **No. of Seed Clubs**

21 **No. of Families Using Agricultural Technology**

a Traditional (Indigenous Technical Knowledge)
b Improved Technology

22 **Availability of Improved Agricultural Implements**

a Tractor
b Duster
c Sprayer
d Thresher
e Seed Drill
f Diesel pump

23 **Availability of Signboards, Information Boards and Wall-writing**

a Signboards
b Information Boards
c Wall-writing

24 **No. of Unemployed Rural People (16 yrs. and Above)**

25 **No. of Disputes**

a Revenue (Property Related)
b Faujdari (Criminal)

26 **Data on Social Consciousness**

Sr. No.	Indicator	No. of instances	Details
1			
2			
3			
4			
5			
6			
7			
8			
9			

27 Social Map

a Topography & Hydrology
b Enterprise Map
c Village

Questionnaire for Family Survey

Survey Done On (Date):

1 Village Name

a Panchayat
b Block
c Tehsil
d District
e Postal Address
f Pin Code

3 Land Holding (In Acres)

a Irrigated Area
b Cultivable Area
c Orchard/No. of Plants & Type

4 Irrigation Facilities

a Canal
b Tube Well
c Ponds
d
e
f

5 Crop Productivity & Its Area

Sr. No.	Crop	Area in Acres	Productivity (Quintal per Acre)	Total Production	Quantity Consumed	Quantity Sold (Quintal and Rs.)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						

2 Family Members' Details

Sr. No.	Name	Father's Name	Mother's Name	Relation-ship with the Head of the Family	Age	Sex	Physically Fit/Unfit (with Cause)	Educational Qualification	Inclination Toward Self Employment	Occupation	No. of Days Employed	Income	Aware-ness About the Village	Participate in *Gram Sabha* Meetings

6 No. of Animals

Sr. No	Animal	No. of Animals	Breed	Production per Animal	Quantity Sold
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

7 Agricultural Equipment

Tractor	Yes ☐	No ☐	
Thresher	Yes ☐	No ☐	
Seed Drill	Yes ☐	No ☐	
Sprayer	Yes ☐	No ☐	
Duster	Yes ☐	No ☐	
Diesel engine	Yes ☐	No ☐	
Any other	Yes ☐	No ☐	If yes, specify

8 Entertainment Facilities

Television	Yes ☐	No ☐	
Radio	Yes ☐	No ☐	
Tape Recorder	Yes ☐	No ☐	
Games	Yes ☐	No ☐	
Any other	Yes ☐	No ☐	If yes, specify

9 Transport Facilities

Car/Jeep	Yes ☐	No ☐
Motorcycle/Scooter	Yes ☐	No ☐
Cycle	Yes ☐	No ☐
Bullock cart	Yes ☐	No ☐

10 Source of Drinking Water and Its Distance From House

a	Hand Pumps	Distance
b	Well	Distance
c	Tubewell	Distance
d	Piped Water	Distance
e	Any Other	Distance

11 Methods of Medical Treatment

a Allopathic
b Ayurvedic
c Traditional
d Jhad Phook
e Other

Preference
1
2
3
4
5
6

12 Dispute

Type of Dispute	Yes	No	Registered	Not Registered	Period of Dispute
Family Disputes					
Revenue Disputes					
Foujdari (Criminal)					
Any Other - Describe					

13 Condition of Houses

a Katcha ☐
b Pakka ☐
c Katcha/Pakka ☐
d Hut ☐

14 Facilities Available in the House

a	Toilet	Yes	☐	No	☐
b	Drainage	Yes	☐	No	☐
c	Soak Pit	Yes	☐	No	☐
d	Cattle Shed	Yes	☐	No	☐
e	Compost Pit	Yes	☐	No	☐
f	NADEP	Yes	☐	No	☐
g	LPG Gas	Yes	☐	No	☐
h	Biogas	Yes	☐	No	☐
i	Solar (Cooking System)	Yes	☐	No	☐
j	Telephone	Yes	☐	No	☐
k	Electric Connection	Yes	☐	No	☐

15 Nutritional Kitchen Garden

a Available Yes ☐ No ☐

16 Name of Person in Family Suffering From Serious Diseases

Sr. No.	Name	Age	Sex	Name of Diseases	Suffering Since	Treatment Taken From

17 Knowledge About folklore Medicine (Family Menber's Name)

Name of the Person	Name of the Plant		Uses of the Plant
	Local	Botanical	

18 Health Programme Implemented

a Vaccination During Pregnancy Yes ☐ No ☐

b Child Vaccination Yes ☐ No ☐

If yes, Schedule of Vaccination

i Completed

ii Not Completed

c Awareness About Family Planning Yes ☐ No ☐

If yes, Contraceptive Method Applied or Not

i Applied

ii Not Applied

19 Children's Data

No. of Births During the Last 3 Years	No. of Deaths of Infants During the Last 3 years	No. of Malnourished Children and Adults

20 Malnutrition Data of Children/Adults

Sr. No.	Name	Sex	Age	Height (feet)	Weight (kg)	Cause/ Disease

21 Availability of Guduchi & Tulsi Plants

a Tulsi Yes ☐ No ☐

b Guduchi Yes ☐ No ☐

22 No. of Family Members Who Do Not Have Proper Clothes or Bedding

a Clothing Yes ☐ No ☐

b Bedding Yes ☐ No ☐

23 No. of Family Members Who Are Not Getting 2 Meals a Day

24 No. of Family Member Who Have Migrated For Employment

a Permanent

b Seasonal

c According to Need

25 Training Taken

Sr. No.	Family Member's Name	Type of Training/ Skill	Training Institute	Year of Passing

ACTION PLAN

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
1	Poverty	Sustainable Development of the Village	Educating farmers. Formation of *Gram Vikas Samiti*	KVK	

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless

Implementation schedule -

2004										2005												2006	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
2	Poverty	Improved water availability for drinking and irrigation	Educating farmers through exposure visit to KVK. Motivation of villagers. Appropriate methods of rainwater harvesting and irrigation channels	KVK	

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless

Implementation schedule -

2004										2005												2006	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

The 512 villages in the Self-Reliance Campaign

North Region (Uttar Pradesh)

1. Sangrampur
2. Jagannath Ka Purva
3. Harsauli
4. Balvapurva
5. Ramsukha Ka Purva
6. Thakur Ka Purva
7. Ranipur
8. Kushwaha
9. Mukvan
10. Barampur
11. Bharthaul
12. Chauki dad
13. Kalran
14. Haripurwa
15. Bailauhan
16. Chaube
17. Gautam Purwa
18. Hariharpur
19. Mavai Taraon
20. Mavai Pahra
21. Shivrajpur
22. Chivlaha
23. Pathraudi,
24. Dafai
25. Kalla,
26. Chakla, Gurubaba
27. Theekapurwa
28. Baihar
29. Dokaha
30. Lambaria
31. Chakukai
32. Mangaliya
33. Padri
34. Karari,
35. Karari Chhoti
36. Kajipur
37. Dhaurahi mafi,
38. Lehuchh,
39. Bhataura
40. Amiliha
41. Chauki
42. Kachipurva,
43. Chamaran Ka Purva
44. Kurmi
45. Sanvarsi
46. Danaipurva
47. Barchapurva
48. Rahunipur
49. Patauda
50. Harijan purva
51. Satauli
52. Taronav
53. Bhabhai
54. Chunki
55. Tilkhari
56. Gaderiyan
57. Puriyan
58. Narayanpur
59. Surajkund
60. Chandragahna
61. Amiliha Purwa
62. Arakhan Purwa
63. Sabhapur
64. Khajuriha
65. Lodhan Purva
66. Budhuva Ka Purva
67. Faluha Ka Purva
68. Patha Ka Purva
69. Sadhu
70. Lodhwara
71. Bhagvat Mali Ka Purva
72. Neelchand Ka Purva
73. Bhole Pandit Ka Purva,
74. Daduram Ka purva
75. Itraur
76. Ramvaran Ka Purva
77. Banvaripur
78. Kanjarpurva
79. Chakaudh
80. Gayaka Purwa
81. Harika Purwa
82. Gurda Purwa
83. Kadhaipur
84. Dubari
85. Aranmafi
86. Sehra Ka Purva
87. Gaurimafi
88. Kuchbaniya
89. Bhuinhari
90. Akiran Purva
91. Babupur
92. Naubasta
93. Lalan Purva
94. Girdhar Purva
95. Sadhu Purva
96. Pachokhar
97. Rampal Ka Purva
98. Viswanath Ka Purva

99. Majhiyar
100. Naiduniya
101. Gautam Ka Purva
102. Kaheta
103. Seetaram Ka Purva
104. Siddhgopal
105. Balia Ka Purva
106. Kumharan
107. Kucharam
108. Rahuniya
109. Rambahori Ka Purva
110. Madhi Ka Purva
111. Sikri Ka Purva
112. Bachran
113. Gosaipur
114. Gorakoni
115. Bholapur
116. Gargan Purva
117. Titihra Purva,
118. Nonar
119. Khumani
120. Patel Ka Purva
121. Dauli,
122. Chitani,
123. Arjunpur
124. Guthaupur
125. Raghunandan Purva
126. Michkuriya
127. Ladehta
128. Kalwaliya
129. Dudauli,
130. Patauriya
131. Dhamauliya Purva
132. Mirzapur
133. Harisan pur
134. Panauti
135. Devra
136. Yadev Purva
137. Nai Duniya
138. Kushaili
139. Kewat purwa,
140. Hahijanpurwa
141. Derapurwa
142. Rampuriya Avval
143. Tera Bujurg
144. Tera Khurd
145. Kumharan Ka Purva
146. Bhola Ka Purva
147. Bhabhet,
148. Kaloni, Baraudha
149. Bhadevra
150. Amuva
151. Nunagar
152. Harijanpurwa
153. Atarsui
154. Gubraul
155. Patiyan Purwa
156. Sikari
157. Avan
158. Ramsingh Ka Purva
159. Paikora
160. Shankargarh
161. Choraha
162. Kushwahapurwa
163. Binoura
164. Karaundi
165. Kuin
166. Ghurrehta
167. Arkhan Ka Purva
168. Sheetalpur
169. Ramtekwa
170. Bodipurva
171. Magrahai
172. Ramsevak Ka Purva
173. Bandha
174. Bhujauli
175. Devruch
176. Beerbal Ka Purva
177. Mahruch
178. Naibasti
179. Dadhiya,
180. Kanhvaniya
181. Bhaupur,
182. Mangalpurva,
183. Chunkapurva
184. Hardauli
185. Anipur
186. Rampuriya Harijan
187. Dhobian Ka Dera
188. Yaday Purva
189. Harijan Purva
190. Kachiyah
191. Hardayal Purva
192. Khatikan Purva
193. Ahiranpurva
194. Chanhat
195. Ganeeva
196. Ghoorpur
197. Ganga Ka Purva
198. Bhainsai Purva,
199. Kedar Ka Purva
200. Kuin
201. Akbaria
202. Chakgaura

203. Augani,
204. Hanumanpur
205. Boodha
206. Semarwar
207. Dhan
208. Kolhai
209. Varhat
210. Kapuri
211. Harijan Ka Purva
212. Kushwaha Ka Purva
213. Kshita Ka Purva
214. Singhpur
215. Ramakol
216. Bandhi
217. Gaderiyan Purva
218. Natanpurva
219. Turkaviran
220. Gaderiyanpurva
221. Gadhi Kala
222. Padari
223. Jilla
224. Madna
225. Pamari
226. Futaha
227. Naiduniya,
228. Nayachandra
229. Bagiya
230. Kherhan
231. Khancha,
232. Vilokhar
233. Nakwahi
234. Pipraunhi
235. Semardaha
236. Losariya
237. Kukrahai
238. Garehta
239. Babhauda
240. Lalanpuwa
241. Hullapurwa
242. Gopipurwa
243. Gadahiya
244. Kachar Purwa
245. Kol
246. Marjad Pur
247. Sukhanandan Purwa
248. Palaya
249. Dhobin Purwa
250. Muslim Purwa
251. Banadi
252. Gadiwa
253. Vinayakpur
254. Ahiran Purwa
255. Bauna Ka Purva
256. Bagaichi
257. Naiduniya
258. Masteran Ka Purva
259. Mainahai
260. Bhaganpur
261. Ramraheesh Ka Purva
262. Patelan Ka Purva
263. Darri
264. Semariya
265. Kaloni
266. Padaha
267. Babupurchauki
268. Jaganath Wasi

South Region (Madhaya Pradesh)

1. Khodhari
2. Degrahat
3. Tagi
4. Bichhian
5. Karariya
6. Deolaha
7. Mawan Tola
8. Ahiran Tola
9. Godan Tola
10. Umariya Tola
11. Rohiniya
12. Bhargawan
13. Dalela
14. Khadar Tola
15. Kakraha Tola
16. Ahari Tola
17. Patna Kala
18. Patni
19. Nai Basti
20. Kanpur
21. Dandi tola
22. Kelhaura
23. Talab tola
24. Daggi Tola
25. Sahu Tola
26. Jhiriya ghat
27. Malgausa
28. Malgausa
29. Bhatiyan
30. Dandin
31. Majhpurwa
32. Addan Tola
33. Baruwa
34. Kalran Tola
35. Chhanihara Tola
36. Pauranik tola

37. Kolan Tola
38. Hiraundi
39. Kathauta
40. Phutaha
41. Parewa
42. Chandaini
43. Telai Chuwa
44. Putri Chuwa
45. Mahtain
46. Chhiulaha
47. Dadiyan
48. Kaimaha
49. Adhwa
50. Birgadha
51. Barha
52. Bhatiya
53. Banehari
54. Kishunpur
55. Bhathwa
56. Gadokhar
57. Khairwar Majhgawan
58. Pipri Tola
59. Lalpur
60. Andhiyara
61. Gursahai
62. Sahijanaha
63. Koriyan
64. Singhpur
65. Madulahai
66. Jerwar
67. Kurman Tala
68. Patiyan
69. Hirapur
70. Karaula
71. Ranipur Devan
72. Ranipur Lodhan
73. Ranipur Baruhan
74. Dadiha
75. Rampur Khurda
76. Rampur Kala
77. Veerpur
78. Harsend
79. Chhatahari
80. Hardi
81. Piparahai
82. Mukat
83. Mahapar
84. Amua
85. Badkhera
86. Ahari Tola
87. Karaundi Tola
88. Sejwar
89. Bhagda
90. Lalapur
91. Raghaowan
92. Chhaihan
93. Nai Duniya
94. Padri
95. Udaili
96. Bharatpur
97. Vangipurwa
98. Kawarin(Baheliyan)
99. Paldeo
100. Naubasta
101. Banshipur
102. Paushalaha
103. Jugulpur
104. Harduwa
105. Kharha
106. Pokhari
107. Katel Purwa
108. Gadariyan
109. Tedhi
110. Amha
111. Purankher
112. Patwaniya
113. Jhari
114. Putariha
115. Unchamar
116. Hardi Kothar
117. Hardi Jagir
118. Gumna
119. Jilaha
120. Sanda
121. Unchamar
122. Pradhan Purwa
123. Brahmipur
124. Holhai
125. Sivrajpur
126. Vishalpur
127. Nakaila
128. Mara
129. Gailaha
130. Lodan Purwa
131. Mohini
132. Mauriyan
133. Mahabiran
134. Shahpur
135. Pokhariha
136. Sonwarsha
137. Arjunpur
138. Neebi
139. Patharkachhar
140. Belauhanpurwa

141. Dauna
142. Khatikankaloni
143. Mahtau
144. Mukhiyanpurwa
145. Lakshmaugang
146. Gadariyantola
147. Lalpur
148. Kaloni
149. Kandar
150. Harijan Purwa
151. Mahraj Nagar
152. Bheeta
153. Patwaniya
154. Chuwa
155. Karwahar
156. Kathar
157. Bhiyamau
158. Kherwa
159. Amiliya
160. Atrar
161. Duduwar
162. Harijan Basti
163. Chandai
164. Suvidhagram
165. Nandgram
166. Kailashapur
167. Kawar
168. Panghati
169. Turra,
170. Gauhani
171. Patangar
172. Barha
173. Damdi Tola
174. Khadra Tola
175. Jamuniha
176. Hardauha
177. Naugwan
178. Chauki Tola
179. Nai Basti
180. Amirti
181. Kajra
182. Kajra
183. Chaoki Tola
184. Gujhawa
185. Selha
186. Chhanihra
187. Baidaha
188. Nai Basti
189. Sonwarsha
190. Dewra
191. Bariamarai
192. Baruee
193. Mahuliya
194. Madaiena
195. Machakhada
196. Puranakher
197. Baidan Tola
198. Pindra
199. Kailashpur
200. Mahulikher
201. Barha
202. Gahira
203. Belha
204. Chaurha
205. Nai Basti
206. Pagar Kala
207. Nai Basti
208. Ucha Tola
209. Ahari Tola
210. Nayakher
211. Pagar Khurda
212. Baidhan Tola
213. Bihriya Tola
214. Badraha
215. Nai Basti
216. Bhatiya Tola
217. Jhakhaura
218. Kailaha
219. Jariha
220. Selaura
221. Kathara
222. Ledra
223. Khohiya
224. Tamar
225. Udaili
226. Baruwa Senduri
227. Chitahara
228. Chaurehi
229. Purankher
230. Bundelapurwa
231. Bramhipur
232. Holhai
233. Sivrajpur
234. Vishalpur
235. Pachhit
236. Tagi
237. Badbada
238. Dighari
239. Barhata
240. Tighara
241. Kachhiyan Tola
242. Patna Khurda
243. Patharigadada
244. Sanna Tola

Demographic Composition of the 512 Villages

Sr. No.	Region	No. of Families	Adults		Children	
			Male (no.)	Female (no.)	Male (no.)	Female (no.)
1	North Region	27027	39829	33226	8117	7204
2	South Region	15081	40789	34738	7971	7015
	Total	**42108**	**80618**	**67964**	**16088**	**14219**

Demographic Composition of Farm Families

Sr. No.	Region	Caste				Total
		General	OBC	SC	ST	
1	North Region	4700	13724	8603		27027
2	South Region	3479	5230	2367	4005	15081
	Total	**8179**	**18954**	**10970**	**4005**	**42108**

Type of Housing

Sr. No.	Region	Mud (*Kacha*)	Brick (*Pakka*)	*Kacha Pakka*	Hut
1	North Region	10751	1019	2559	
2	South Region	12569	406	1281	338
	Total	**23320**	**1425**	**3840**	**338**

Distribution of Farm Families According to Size of landholdings (acres)

Sr. No.	Region	Big (no.)	Small (no.)	Marginal (no.)	Landless (no.)	Total
1	North Region	658	9331	17169	4369	27027
2	South Region	518	4884	4680	4554	14636
	Total	**1176**	**14214.8895**	**21849.29876**	**8922.94701**	**41663**

Area and Productivity of Crops

Sr. No.	Crop	North Region		South Region		Total	
		Area (acre)	Av. Productivity (Q/acre)	Area (acre)	Av. Productivity (Q/acre)	Area (acre)	Av. Productivity (Q/acre)
A	**Cereals**						
	Paddy	5432.10	6.20	11322.62	5.44	16754.72	5.68
	Sorghum	6067.81	3.91	4567.27	3.23	10635.08	3.62
	Wheat	15269.02	2.61	16576.95	5.88	31845.97	6.75
	Bajra	3682.15	6.26			3682.15	6.26
	Barley	1263.92	6.03	2593.70	3.90	3857.62	4.60
B	**Pulses**						
	Pegion pea	3687.94	2.61	4103.59	2.64	7791.53	2.62
	Blackgram	0.00	0.00	209.05	2.73	209.05	2.73
	Lentil	5816.76	2.75	2064.71	2.67	7881.47	2.73
	Chickpea	7963.58	3.73	12308.84	3.62	20272.42	3.67
C	**Oilseeds**						
	Soybean	0.00	0.00	464.75	3.58	464.75	3.58
	Sesamum	257.55	2.97	3350.62	2.27	3608.17	2.32
	Mustard	1479.53	2.93	1845.98	2.31	3325.51	2.59
	Linseed	703.02	2.86	935.95	1.77	1638.97	2.24
D	**Vegetables/spices**	442.00	6.19	1102.47	18.21	1544.47	14.77

Livestock Wealth

Sr. No.	Type of Livestock	North Region		South Region		Total	
		No.	Av. Productivity (Litre/day)	No.	Av. Productivity (Litre/day)	No.	Av. Productivity (Litre/day)
1	Cow	10895	0.9	16469	**0.59**	27364	0.75
2	Buffalo	9826	1.9	7254	1.3	17080	1.6
3	Goat	9157	0	13554	0	22711	
4	Sheep	2081	0	731	0	2812	
5	Pig	939	0	817	0	1756	
6	Poultry	1340	0	2171	0	3511	
7	Bullock	7747	0	11570	0	19317	
8	Others	1608	0	869	0	2477	

Source of Income (Rs.)

Sr. No.	Region	Agriculture	Service	Labourer	Others
1	North Region	203011363	135570678	105556666	69630600
2	South Region	287002104	116825573	160740911	56152813.5
	Total	**490013467**	**252396251**	**266297577**	**125783414**

Source of Irrigation (Nos.)

Sr. No.	Region	Canal	Tubewell	Pond	River	Other
1	North Region	1521	4393	442	542	1776
2	South Region	222	379	586	181	661
	Total	**1743**	**4772**	**1028**	**723**	**2437**

Entertainment Facilities (Nos.)

Sr. No.	Region	Television	Radio	Tape recorder	Games
1	North Region	1880	3686	1199	258
2	South Region	1277	3603	739	252
	Total	**3157**	**7289**	**1938**	**510**

Transport Facilities

Sr. No.	Region	Car/Jeep	M.Cycle/Scooter	Cycle	Bullock Cart
1	North Region	383	1531	9273	1933
2	South Region	313	1080	8508	1391
	Total	**696**	**2611**	**17781**	**3324**

Facilities Available in the House

Sr. No.	Region	Toilet	Drainage	Soak Pit	Cattle Shed	Compost Pit	NADEP
1	North Region	1459	2958	1367	5424	5026	248
2	South Region	398	1595	428	5488	3152	50
	Total	**1857**	**4553**	**1795**	**10912**	**8178**	**298**

Facilities Available in the House

Sr. No.	Region	LPG Gas	Biogas	Solar	Telephone	Electric	Kitchen Garden
1	North Region	888	493	68	2277	3129	4363
2	South Region	419	313	34	2034	5993	4878
	Total	**1307**	**806**	**102**	**4311**	**9122**	**9241**

Agricultural Equipments

Sr. No.	Region	Tractor	Thresher	Seed Drill	Sprayer	Duster	Diesel Engine	Chaff Cutter	Plough
1	North Region	504	786	308	195	217	1589	650	695
2	South Region	369	685	234	129	39	1654	38	804
	Total	**873**	**1471**	**542**	**324**	**256**	**3243**	**688**	**1499**

No. of BPL Families

Sr. No.	Region	BPL Families
1	North Region	1414
2	South Region	1912
	Total	**3326**

Unemployed Rural Youth

Sr. No.	Region	Unemployed Rural Youth
1	North Region	1282
2	South Region	2016
	Total	**3298**

Migration to towns/cities for employment

Sr. No.	Region	Permanent	Seasonal	Need-Based
1	North Region	1642	2967	672
2	South Region	2311	2113	1077
	Total	**3953**	**5080**	**1749**

Children not goiing to school

Sr. No.	Region	Number
1	North Region	356
2	South Region	624
	Total	**980**

No. of persons suffering from serious diseases

Sr. No.	Region	Number
1	North Region	983
2	South Region	865
	Total	**1848**

Infants - births & deaths

Sr. No.	Region	Birth	Deaths
1	North Region	4692	517
2	South Region	3531	343
	Total	**8223**	**860**

Methods of Medical Treatmnt

Sr. No.	Region	Allopathic	Ayurvedic	Jhad-Phook	Traditional
1	North Region	13683	16502	17263	7671
2	South Region	14740	11047	10643	7848
	Total	**28423**	**27549**	**27906**	**15519**

Awareness of Family Planning

Sr. No.	Region	Yes	No	Method Applied	
				Yes	No
1	North Region	7326	2588	5170	2156
2	South Region	7612	489	4890	2722
	Total	14938	3077	10060	4878

Health Programme Implemented (Vaccination)

Sr. No.	Region	Pregnant Women	Children	Schedule of vaccination	
				Full	Partial
1	North Region	8264	8731	3244	6048
2	South Region	8486	8890	2333	2171
	Total	**16750**	**17621**	**5577**	**8219**

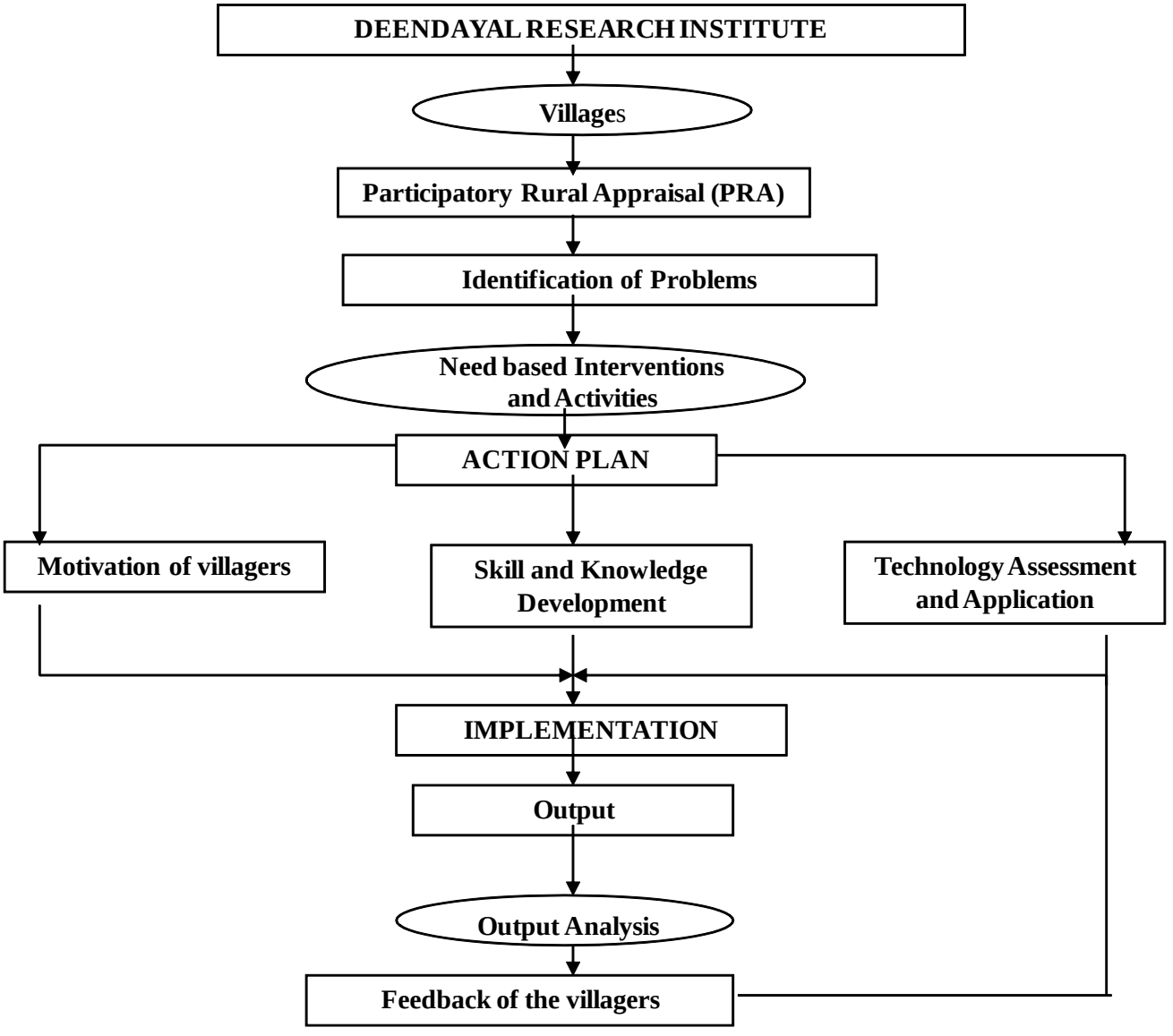
Availabilty of Plants

Sr. No.	Region	*Tulsi*	*Guduchi*
1	North Region	5198	1273
2	South Region	8448	1581
	Total	**13646**	**2854**

Type of Disputes

Sr. No.	Region	Family	Revenue (Civil)	Foujdari (Criminal)	Other	Total
1	North Region	997	521	870	1009	3397
2	South Region	320	725	89	35	1169
	Total	**1317**	**1246**	**959**	**1044**	**4566**

Process for Identification & Implementation of Activities



Poverty

Poverty in India is still rampant despite impressive economic growth. An estimated 250 million people are below the poverty line and approximately 75 per cent of them are in the rural areas.

In general, poverty can be defined as a situation when people are unable to satisfy the basic needs of life. According to the definition by the Planning Commission of India, the poverty line is drawn with an intake of 2400 calories in rural areas and 2100 calories in urban areas. If a person is unable to get that minimum level of calories, then he/she is considered to be below the poverty line.

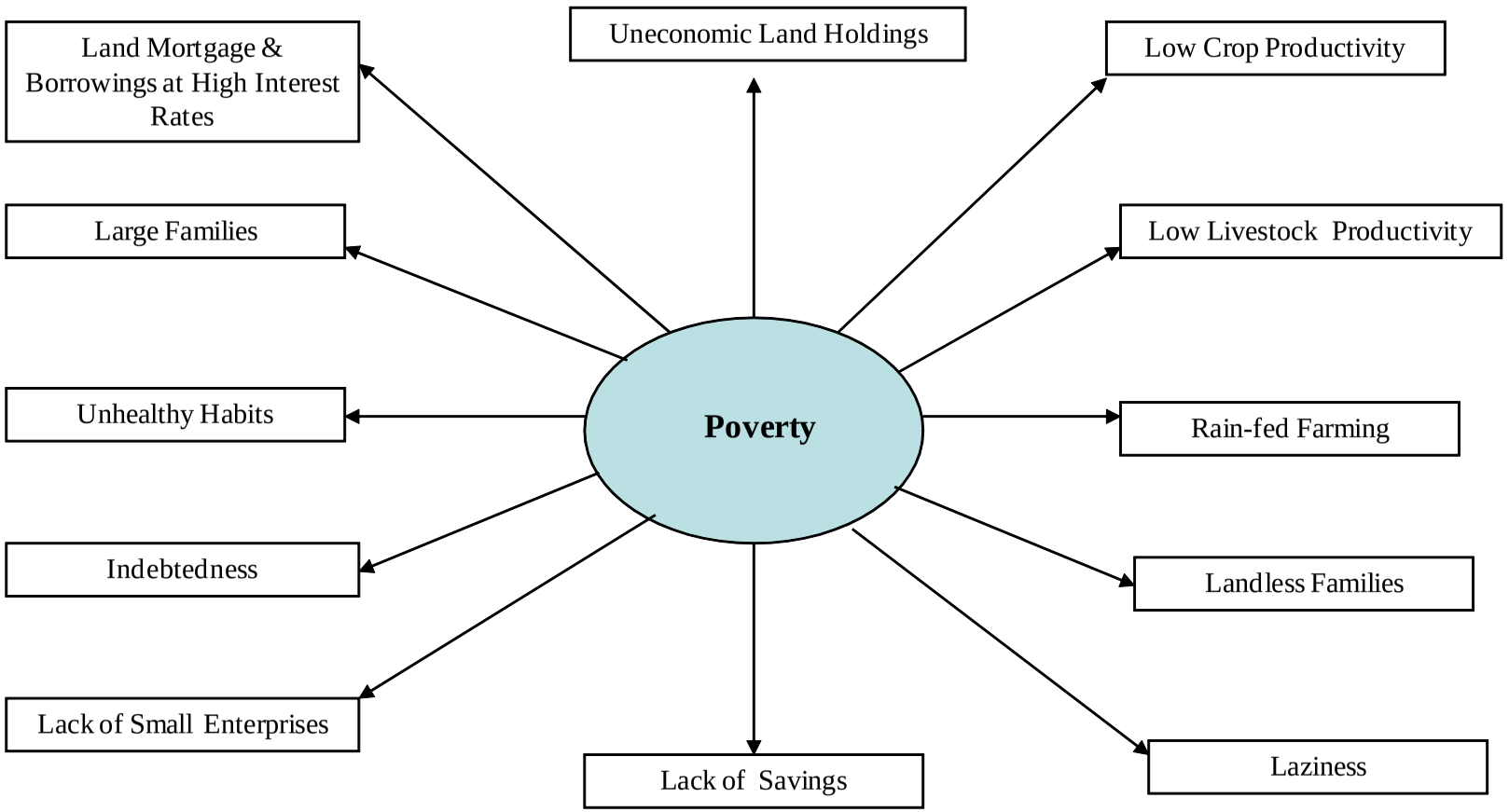
Causes of Poverty in India

- High level of dependence on primitive methods of agriculture
- High population growth rate
- High illiteracy (about 35% of the adult population)
- Regional inequalities
- Protectionist policies pursued till 1991 that prevented high foreign investment

The Government has introduced a number of anti-poverty programmes since independence to alleviate poverty. These include various employment guarantee programmes such as National Rural Employment Programme, Rural Landless Employment Guarantee Programme, etc. Recently, Government has initiated National Rural Employment Guarantee Programme (NREGP). As per NREGP, the government will provide 100 days of employment per year to whosoever is willing to work. NREGP is considered as a landmark programme in poverty alleviation measures.

These activities for poverty alleviation adhere to a fund-based development approach where there was little scope for people's participation, thereby affecting the sustainability of the initiatives and nullifying it effectiveness. Consequently, a large number of persons are still living below the poverty line.

Problem Cause Diagram



Solution Tree for Poverty
Assessment & demonstration of technology
Appropriate Measures for Rainwater Conservation
Preparation of Balanced Rations Through Locally Available Feed Ingredients to Milch Animals
Scientists/Villagers Interactions for Crop Planning
Livestock Feed and Fodder Production
Formation of Village Development Committee
Organic Manure Production Techniques
Seed Production at the village level
Safe Storage of Food Grain.
1.5 and 2.5 acre farming system model
Soil and Water Testing.
Educating Farmers Through Exposure Visits
Livestock Up-Gradation
Knowledge and Skill Up-Gradation of Farmers and Rural Youths Through Training
Animal Health Camp

Activities for income generation

Activities	No. of Programmes	No. of Beneficiaries
Exposure visits of farmers to the *Krishi Vigyan Kendras*	160	10520
Knowledge and skill up-gradation training programmes for farmers and farm women	1292	24860
Knowledge and skill up-gradation training programmes for rural youths	120	1850
Formation of *Gramin Vikas Samiti* (Village Development Committee)	108	1417
Area covered under watershed management	13056	698
No. of water harvesting structures	249	4396
Scientists/villagers interactions for crop planning	333	13774
Substitution of improved varieties tolerant/resistant to drought, disease and insects	165	26201
On farm testing	102	692
Demonstration of Production and Management technology for cereals, pulses, oilseeds, vegetables and spices.		
i. Cereals	270	1143
ii. Pulses	462	1473
iii. Oilseeds	504	1971
iv. Vegetables	45	952
v. Spices	53	396
vi Others	1074	1108
Seed Production at the village level.	6780	20144
Seed Production at KVK	3978	17200
1.5 and 2.5 acre farming system model for converting uneconomical landholdings into economic holdings	54	153
Livestock up-gradation Programmes		
i. Cows	16	3161
ii Buffalos	15	4088
iii Goats	42	5170
Formation of Self Help Groups (SHGs) for income generation	53	795
Safe storage of food grain	43	624
Growing fruit trees near houses, in wastelands and village community lands.	70725	14145
Organic manure production techniques		
i NADEP	109	107
ii Vermi compost	170	170
Livestock feed and fodder production	81	1305
Animal Health Camps	50	4133
Management of farm animals	70	3538
Motivating the villagers to start small savings	4341	4341
Soil and Water Testing	512	3784
Campaign to make the village free of unhealthy habits	4867	42108

Unemployment

The problem of unemployment is the most serious problem in India today. There is unemployment in cities, towns and even in the villages. Unemployment can be defined as a state of 'worklessness' for a man fit and willing to work. They are willing to work but they cannot find any work. It is a condition of involuntary and not voluntary idleness. Some features of unemployment have been identified as follows:

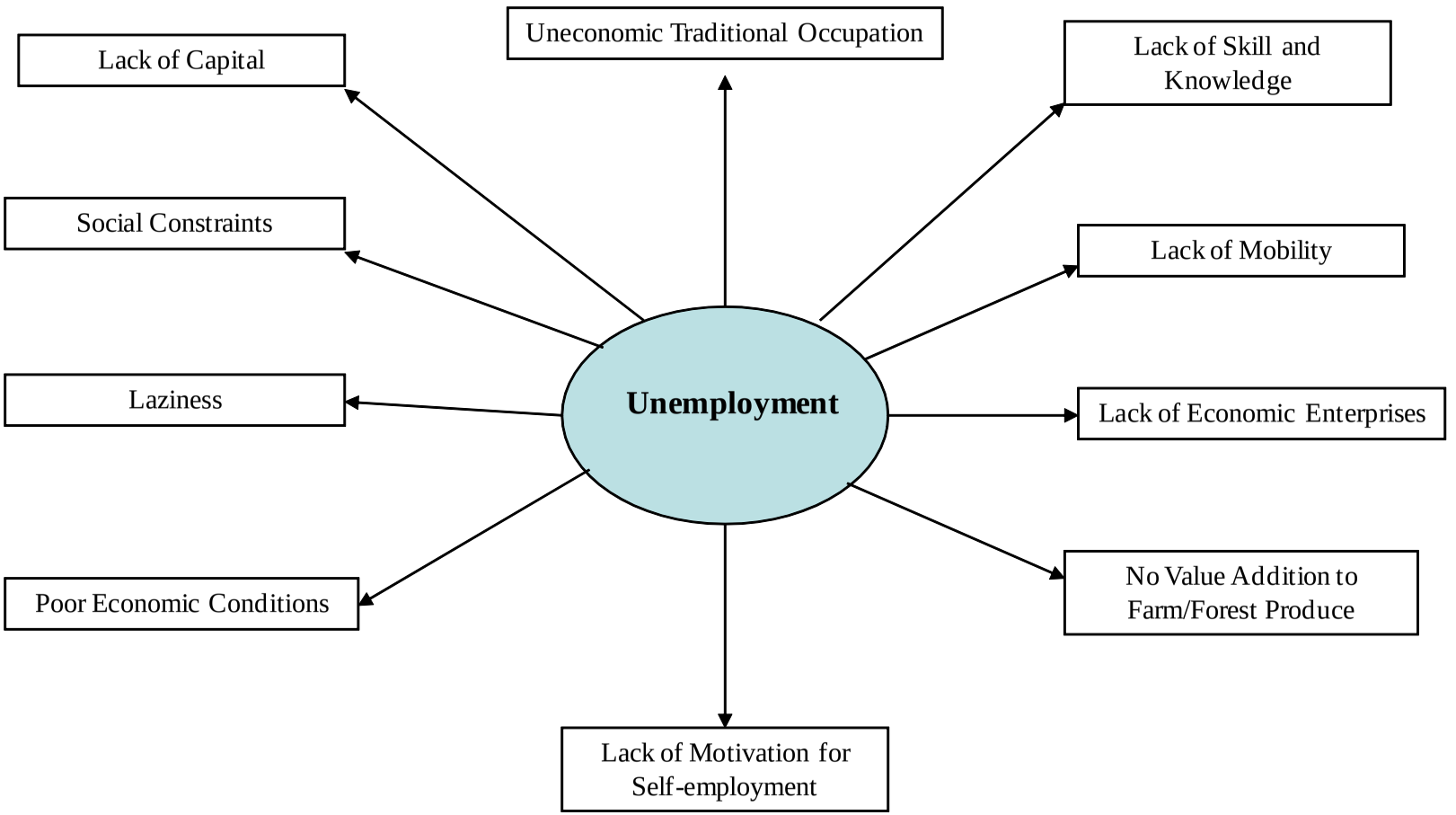
(1) The incidence of unemployment is much higher in urban areas than in rural areas.
(2) Unemployment rates for women are higher than those of men.
(3) The incidence of unemployment among the educated classes is much higher than the overall unemployment percentages.
(4) There is greater unemployment in the agricultural sector than in industrial and other sectors.

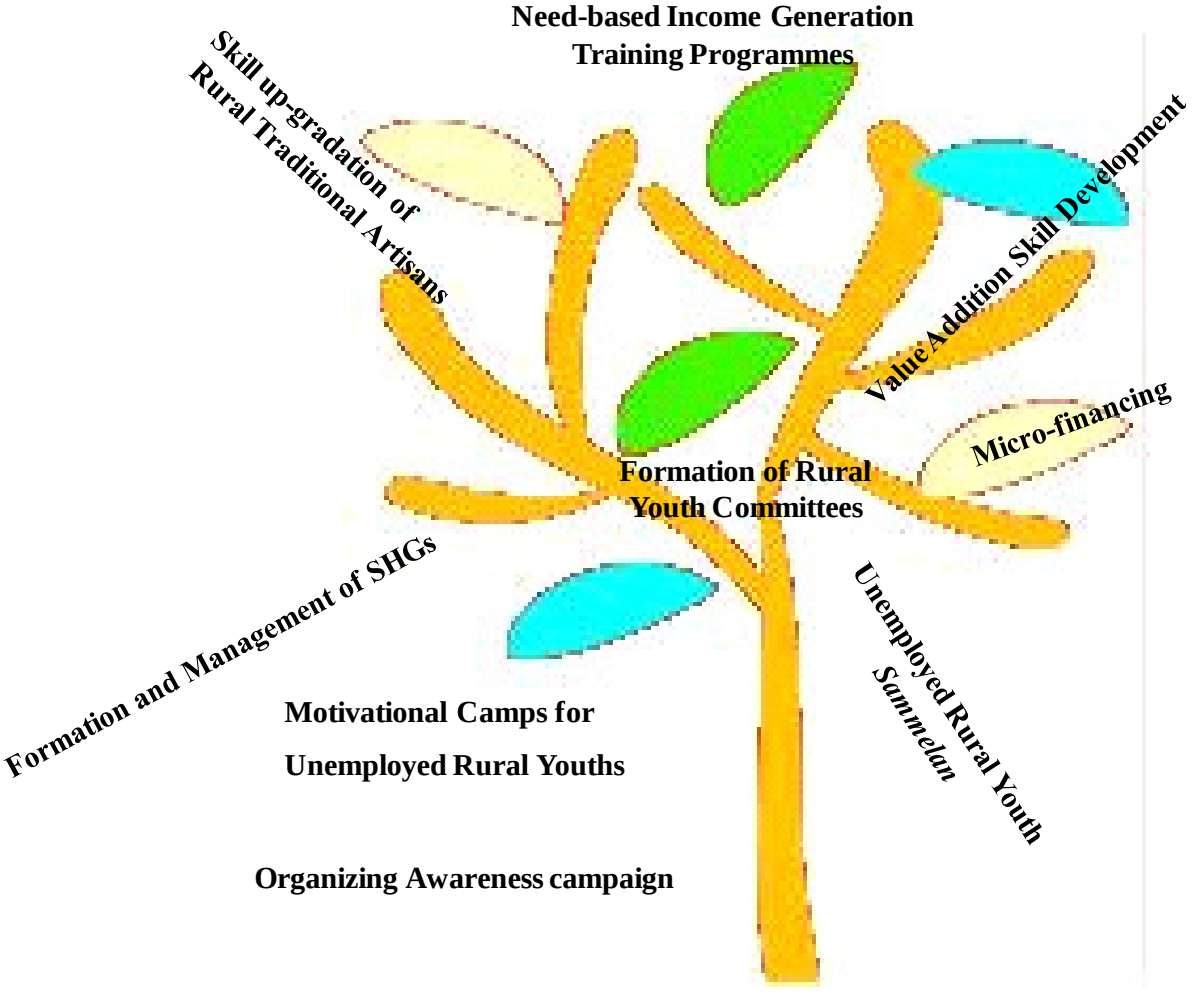
Points 2 and 4 are directly related to rural unemployment. Rural unemployment is one of the burning problems that India faces. Its severity has increased in the period following the new economic reforms.

The remedial measures for reducing unemployment lay greater emphasis on the creation of opportunities for self employment, augmentation of productivity and the income levels of the 'working poor', and a shift in emphasis from the creation of 'relief work' employment to building durable productive assets in rural areas.

Deendayal Research Institute, Chitrakoot carried out an intensive study on unemployment problems and their solutions in the 500 villages under the Self-Reliance campaign started on 26th January 2002. There are many causes of unemployment that have been identified during the intensive village surveys, conducted in 2002-03.

Problem Cause Diagram





Solution Tree for Unemployment

Activities to generate employment in the village

Activities	No. of Programmes	No. of Beneficiaries
Employment Opportunity Awareness campaign/rallies in villages.	249	47277
Motivational camps for unemployed rural youths.	1163	52037
Unemployed rural youth *sammelan* (Fairs).	74	128000
Formation of *Tarunodaya mandal* (Rural Youth Committee).	108	1388
Formation and Management of Self Help Groups(SHGs).	53	795
Interactions between rural youth/experts.	264	35442
Training for Improving the skills of traditional artisans.	655	12540
Need-based income generation training programmes for unemployed rural youths.	349	5905
Value addition skill development programmes.	38	3700
Entrepreneurial development of villagers.	460	5500
Value addition of farm and forest produce.	22	1725
Micro-financing.	54	294
Skill up-gradation of rural traditional artisan	47	1894

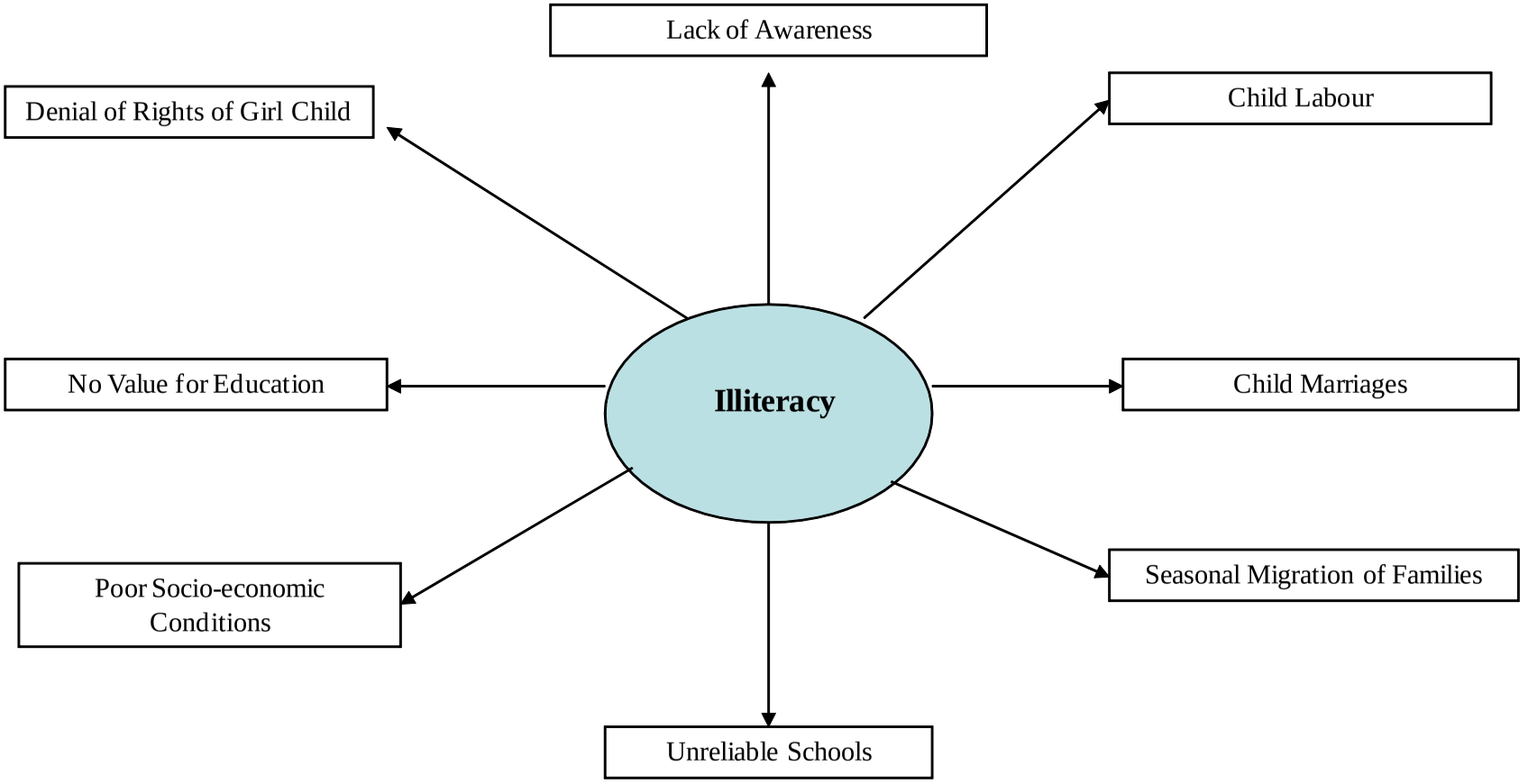
Illiteracy

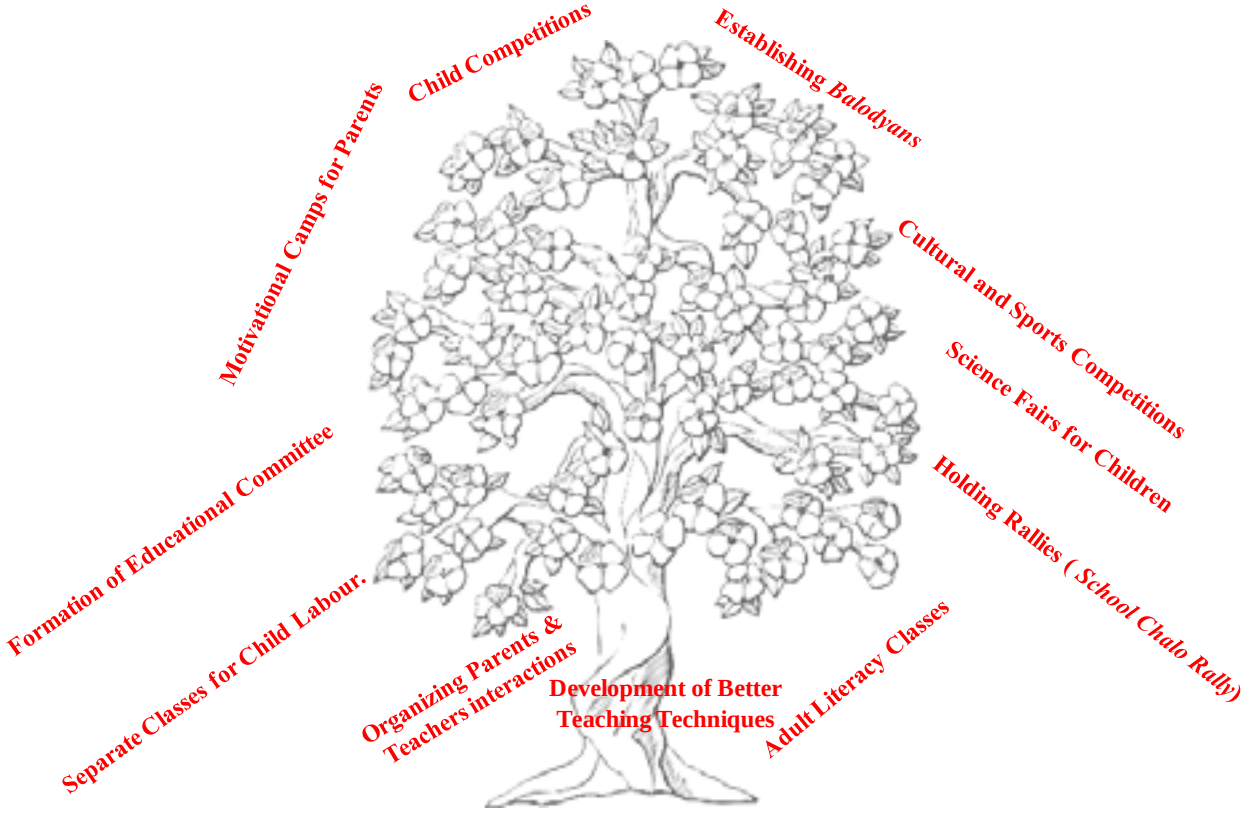
As per the 2001 Census, the overall literacy rate of India is 65.38%. The difference between the highest and the lowest literacy rates is very high and is characterized by a wide gap urban/rural divide. India has a large illiterate population. Most of people in the rural areas are illiterate, and do not even have the knowledge of how to become literate. Most villagers do not have the funds to educate themselves. There is also a wide divide in male and female literacy rates. The male literacy rate is 75.96% and female literacy rate is 54.28%. The social system in India promotes education for the male, while the female population, especially in the deep interiors of the country, is kept away from schools.

Several efforts have been made on the part of the Government to deal with illiteracy. The National Policy of Education, 1986, declared that the whole nation must pledge itself to the work of eradicating illiteracy, particularly in the 15-35 year age group. The National Literacy Mission came into being in 1988 and started striving to involve all sections of the community in the literacy endeavour. The 1992 Education Policy envisaged free and compulsory elementary education of satisfactory quality to all children upto the age of 14 before India entered the 21st Century.

Despite all these efforts, no satisfactory result was obtained. Still, a large percentage of the population remains illiterate in rural areas. Deendayal Research Institute is taking measures to create awareness on literacy.

Problem Cause Diagram





Solution Tree for Illiteracy

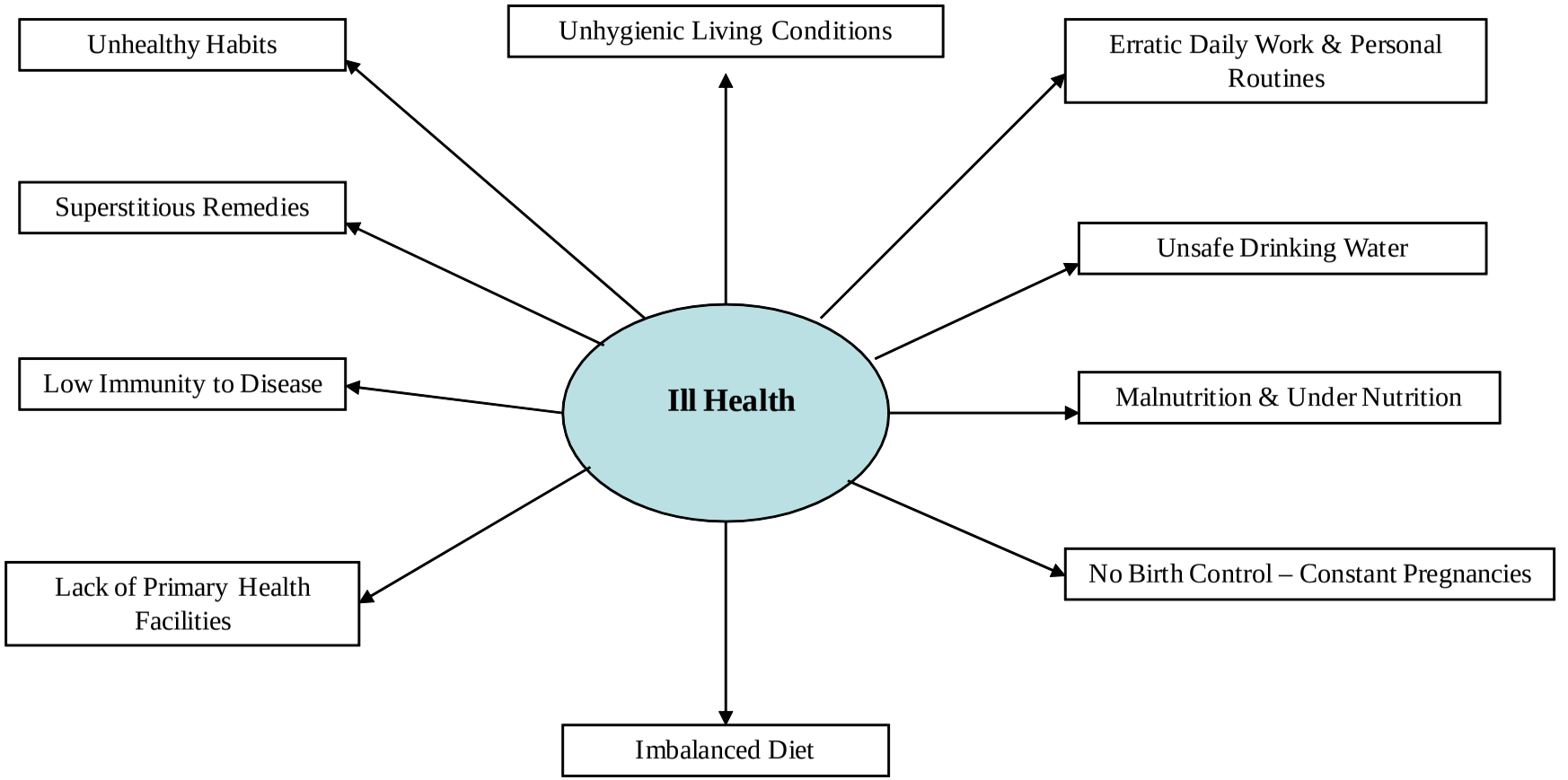
Activities to improve village literacy

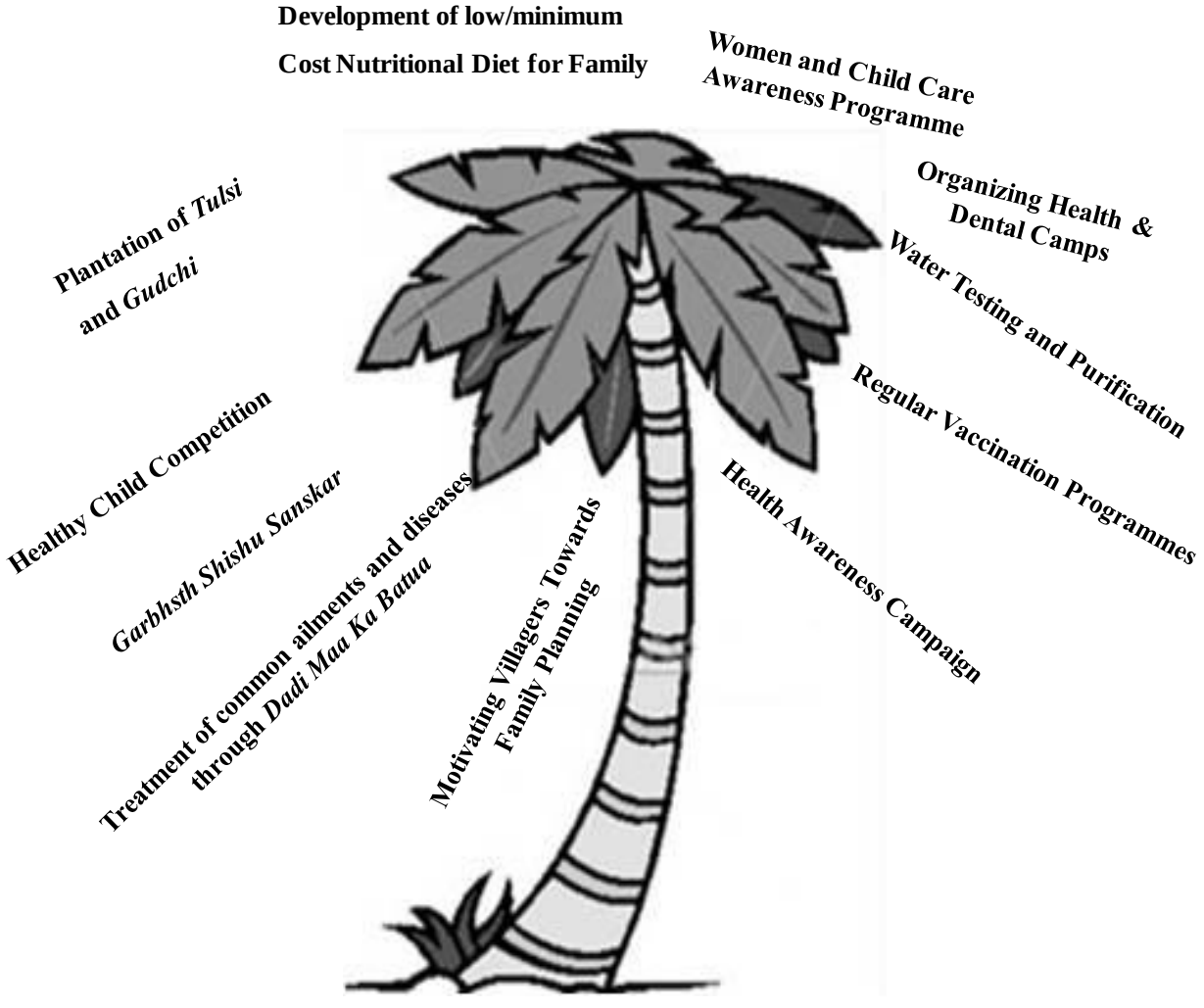
Activities	No. of Programmes	No. of Beneficiaries
Parents & Teachers interactions.	459	4590
Bal Sanskar Kendras (Children Education Centres).	44	4963
Motivational camps for parents.	160	4590
Child competitions at village level.	528	7842
Establishment of *Balodyans* (Children's' Recreational cum Educational Gardens).	16	4963
Rallies (*School Chalo Rally*).	398	38224
Science Fairs for children.	13	6500
Establishment of library in the village.	16	4800
Adult Literacy classes.	44	2375
Cultural and sports competitions.	1383	10056
Motivational camps for children not going to school.	71	1873
Development of better teaching techniques.	108	10800
Educating children through mobile library.	164	16400
Formation of Educational Committee.	108	1388

Health

The World Health Organisation (WHO) has estimated that about 80% population of the world relies on traditional medicine for their primary healthcare needs. India has a rich and ancient history of traditional systems of medicine, but unfortunately, traditional healthcare has been neglected by the Government. About 70% of India's population reside in rural areas and depend primarily on traditional medicine. That is evident from the fact that in 2002, investment in healthcare was only 0.9% of the total GDP. The scenario unsurprisingly is not a very pleasing one. Data shows that every second child in the country suffers from malnutrition, and that over 1,000 people succumb to tuberculosis every day. Almost 60,000 children are born with HIV each year. Basic health care and health assurance seem to be a distant dream for most of the population. India is a country where people are treated for the most basic diseases. Though the government has achieved success in implementation of a medical treatment infrastructure in urban areas, it has failed in the rural areas where the 70% of India's population live. 50% of the diseases that are prevalent in the villages are due to unclean drinking water. The need is to establish a more achievable and simple health system which can ensure good healthcare of the villagers. There is a proverb 'if health is lost everything is lost'. If a person is unhealthy, he cannot work to his full potential. So a self-reliant life pattern in the villages can only be achieved if a priority is given to the health needs of the villagers. To do this, a survey on health-related problems and their causes was carried out by Deendayal Research Institute in the villages of the Self-Reliance Campaign.

Problem Cause Diagram





Solution Tree for Good Health

Activities to improve the health of the villagers

Activities	No. of Programmes	No. of Beneficiaries
Health Awareness Campaign.	302	13965
Healthy Child Competition Programmes.	728	12086
Garbhsth Shishu Sanskar (Pre-natal education) Programmes.	135	831
Women and child care awareness programmes.	382	19100
Design and development of low/minimum cost nutritional diet for family.	918	23756
Nutirtional Kitchen gardens.	4615	4615
Motivational programmes for villagers for collective participation in keeping the villagers neat and clean.	1773	30108
Motivational Programme towards Family Planning.	328	18368
Educating villagers to keep a neat and clean atmosphere in the village.	1800	18810
Plantation of *Gudchi* and *Tulsi* plants in each and every house.	5665	5665
Awareness Programme for villagers about the ill-effects of unhealthy habits.		
Water testing and purification.	1359	10200
Treatment of common ailments and diseases through *Dadi Maa Ka Batua.*	479	32780
Treatment of common seasonal diseases with locally available herbs.	482	13158
Organizing regular Vaccination programmes for children and pregnant mothers.	596	6576
Skill up gradation training programmes for health workers.	13	162
Organizing Health and Dental camps.	203	11286
Formation of Health Groups.	7	3265

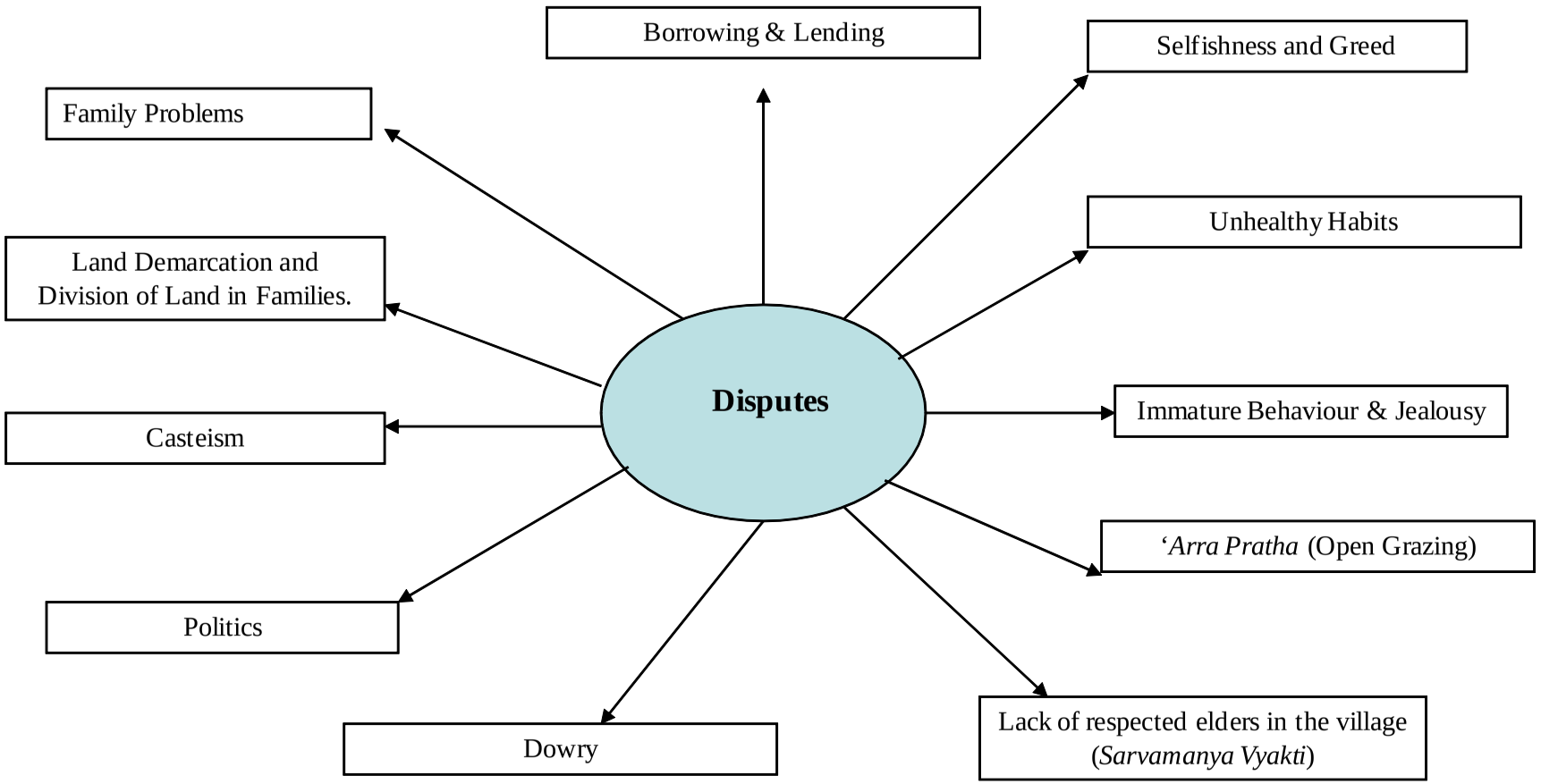
Disputes

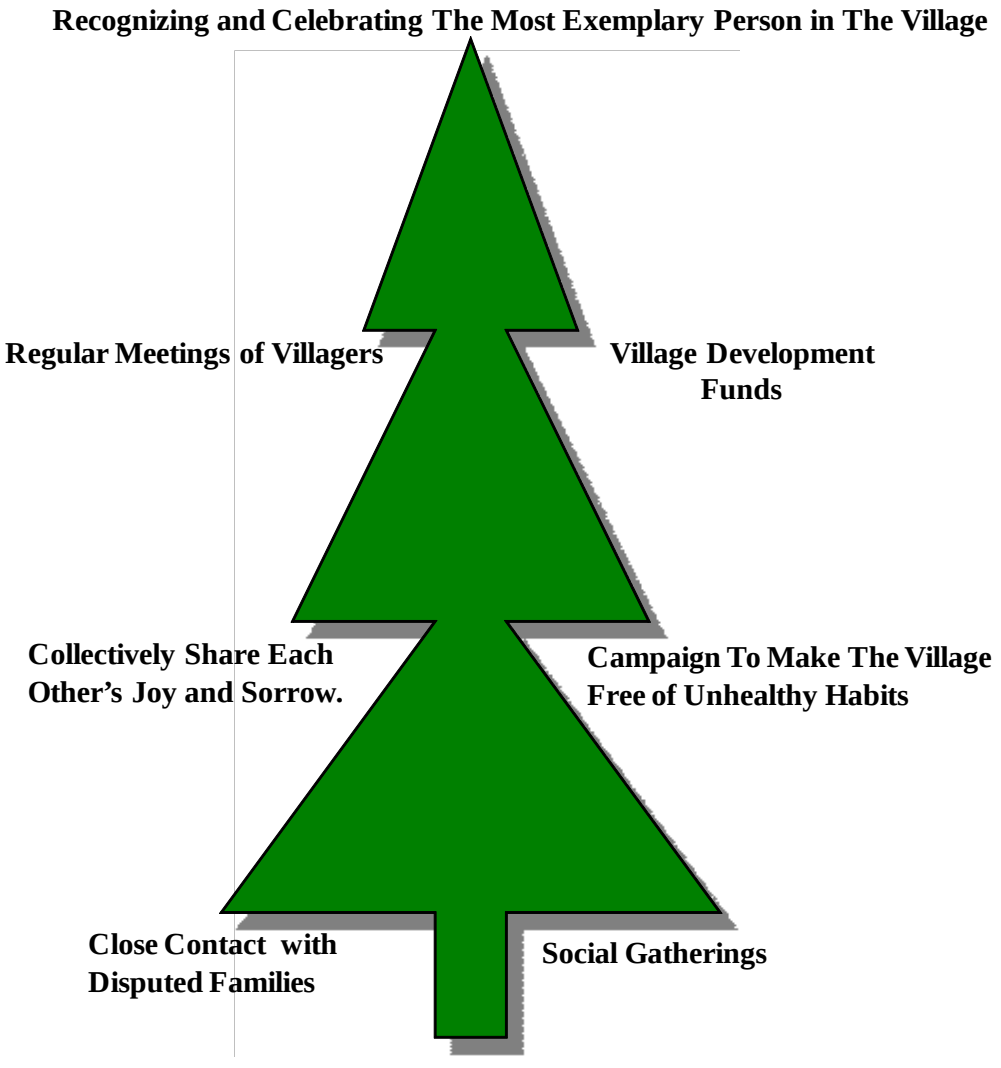
In the current political and social scenario in the country, where division as opposed to unity is being encouraged in every strata of society, it is not surprising that the incidence of disputes are on the rise in rural areas. Most of the disputes are of a civil nature and have basically evolved from petty issues. The major drawback of these disputes is that they impede the progress of both the individuals involved, as well as the community as a whole, since warring neighbours do not want to work together for their common benefit. Also, as India's legal system is overburdened, court cases taken several years to be resolved.

Deendayal Research Institute developed a unique approach for settlement of disputes through mutual understanding among the concerned parties.

A dispute being discussed by the villagers concerned and DRI volunteers

Problem Cause Diagram





Solution Tree for Disputes

Activities to resolve disputes

Activities	No. of Programmes	No. of Beneficiaries
Personal close contact with families in dispute.	6409	10615
Religious, traditional and cultural programmes.	1447	10056
Organizing *Sahbhoj* (Eating Together with Neighbours).	296	88800
Regular meetings of villagers	3124	5107
Motivational Programmes for villagers to collectively share each other's joy and sorrow.	1773	30108
Campaign to make the village free of unhealthy habits.	4867	42108
Regular meetings of villagers	3124	5107
Village Development Fund.	45	235384
Programmes for recognizing and celebrating the most exemplary person in the village.	3124	5107
Organizing community-based ceremonies to respect old people in the village.	41	1681

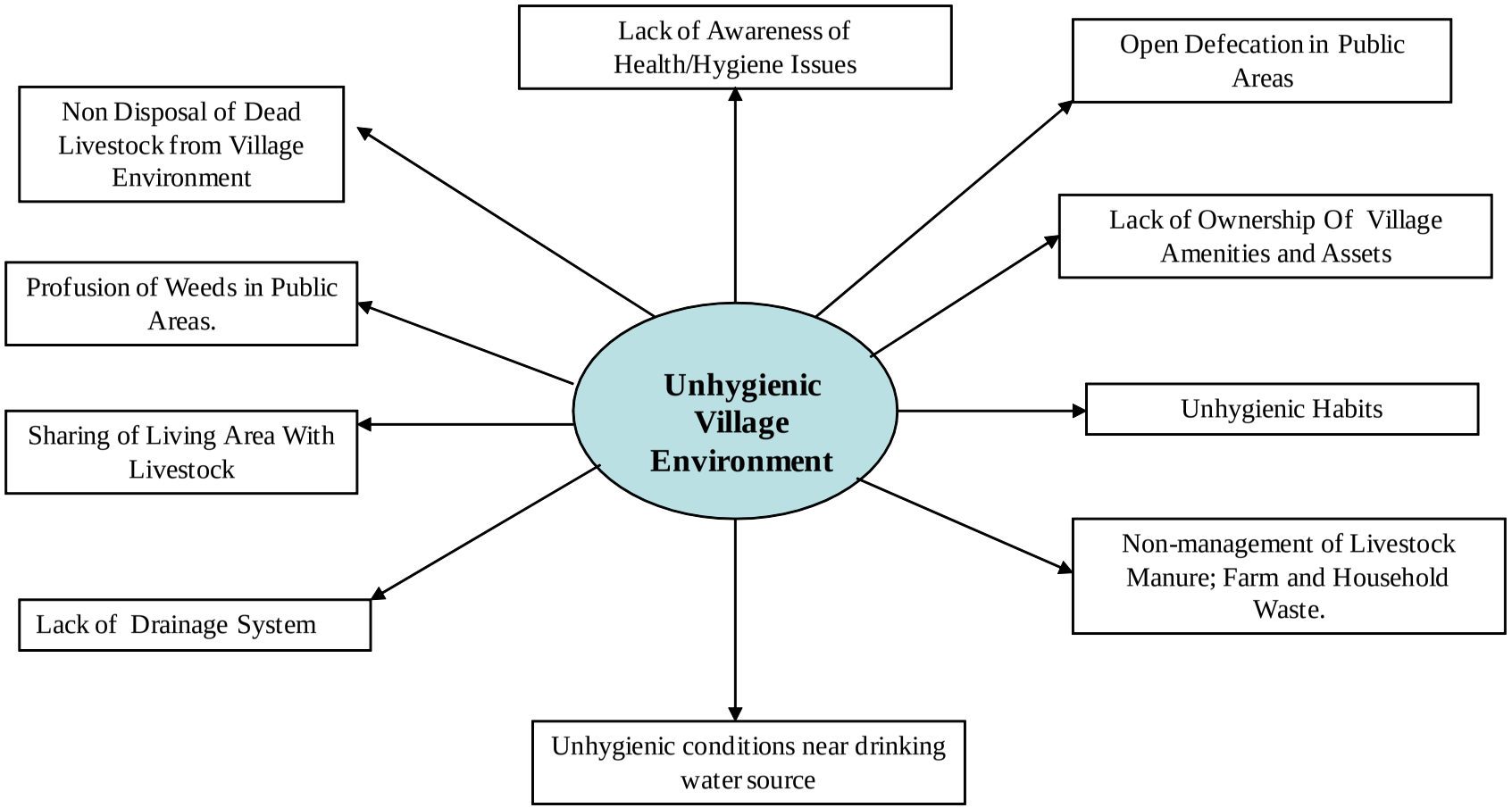
Clean and Green

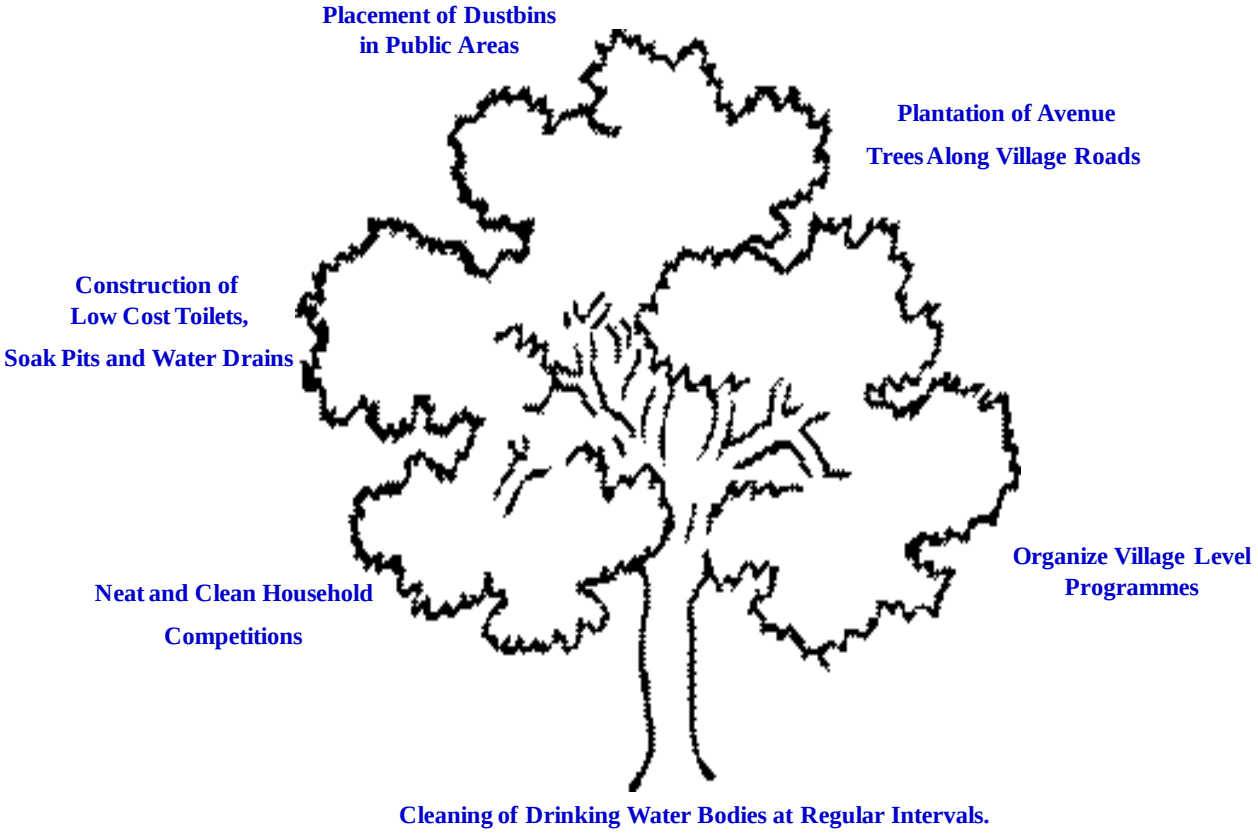
Ancient Indian civilizations laid great emphasis on cleanliness and hygiene. As far back as the Indus Valley Civilization, public and private sanitation were part of civic planning as seen in the ruins of Mohenjodaro. This no longer holds true. Today, the average Indian, in both the urban and rural population, has no sense of personal and public hygiene. In rural India, this leads to various common ailments and diseases. The open water bodies, ponds, hand pumps, wells create severe problems. Accumulation of dirty water causes several water borne diseases and provides rich breeding grounds for mosquitoes.

Cattle share villagers' living space and contribute to the profusion of flies and insects. Open drainage systems in the village are another cause of sanitation problem. The lack of demarcation of garbage dumps and open defection in public areas breed germs, worms and lead to major ailments, the most common being ringworm. Personal hygiene is no longer a primary concern of the villagers. Bacterial and viral diseases are common in the villagers. They are uninformed on basic food and hygiene issues. Stray cattle and pigs also pollute the village environment.

The Deendayal Research Institute has carried out some work for making the village clean and green.

Problem Cause Diagram





Solution Tree for Unhygienic Village Environment

Activities to make the village clean & green

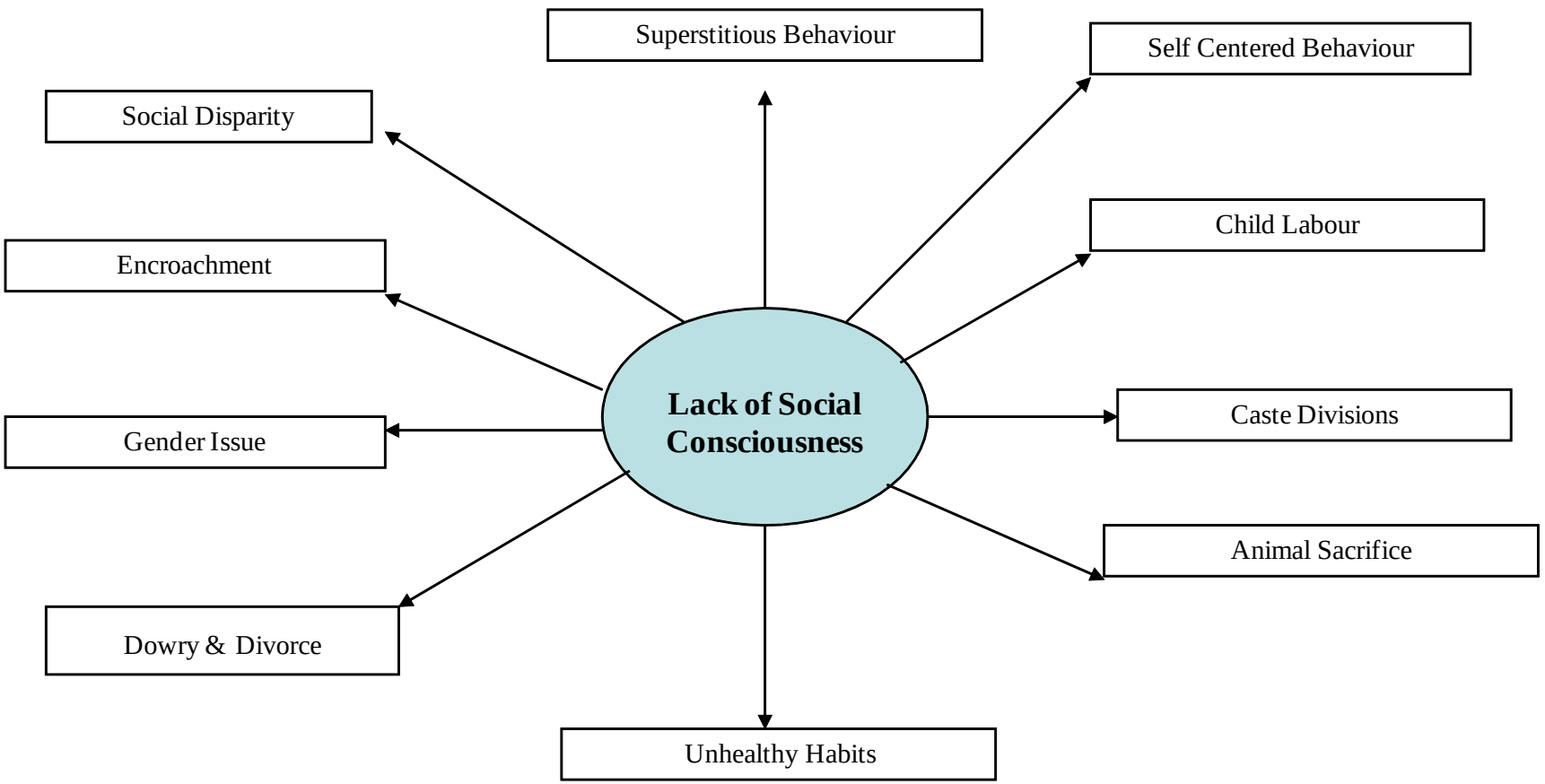
Activities	No. of Programmes	No. of Beneficiaries
Holding Rallies on having a 'neat & clean' village environment.	108	42108
'Neat & clean' household competitions.	1050	3119
Construction of low cost toilets	5050	5050
Placement of dustbins in public areas.	43	2370
Plantation of avenue trees along village roads.	89	10205
Village level programmes at regular intervals in public areas.	1383	10056
Motivational programmes for villagers for participation in keeping the village 'neat & clean'.	1050	3119
Construction of soak pits and water drains.	657	657
Cultural and sports competitions.	1383	10056
Cleaning of drinking water bodies at regular intervals.	1760	6138

Social Consciousness

What makes us all human is our capacity for language, empathy, internal dialogue and emotions. However, before we were capable of such characteristics, we first needed to develop consciousness. It is consciousness that establishes our understanding of ourselves and others. How we interact with others depends on our upbringing, our inherent nature, mood and surroundings.

70% of India's population lives in villages. The villagers live in societies. Togetherness and brotherhood has been a basic human need. But the social consciousness among the villagers has changed. Society is divided into castes. The villagers have become superstitious and self-centred. A wide gap has appeared between rich and poor, higher society and lower society, upper caste and lower caste, male and female, etc. The dowry system is prevalent in rural society and has become part and parcel of every person. Today, there are lakhs of people in authority or engaged in politics, business or other walks of life. Almost all of them are concerned only about themselves and their families and few have a social conscious. What is the cause of all the evils plaguing society? It is the lack of sense of social responsibility. Every individual has to recognize his duty to society and understand that without society he cannot lead a peaceful and happy family life.

Problem Cause Diagram



Solution Tree for Social Consciousness

Activities to awaken a social consciousness

Activities	No. of Programmes	No. of Beneficiaries
Village level programmes at regular intervals.	1383	10056
Personal close contact with families.	6409	10615
Organizing *Sahbhoj* (Eating Together with Neighbours).	296	88800
Organizing social gatherings at the village level.	4867	42108
Campaign to make the village free of unhealthy habits.	4867	42108
Collective celebrations of important festivals.	1447	10056
Organizing community-based ceremonies to respect old people in the village.	41	1681
Wall writing/CD Shows of motivational speeches.	1816	42108

PART III
PATNA KALA - A STUDY OF A SELF-RELIANT VILLAGE

The Village of Patna Kala - A Study

People's participation has been identified as a **necessary condition** for the successful implementation of the Self-Reliance Campaign. Villagers are encouraged to learn and educate themselves in all aspects of the campaign. People's participation is actively sought in the preparation of the action plan, fixing the priorities for work, and the execution of the work planned within the programme.

Since Independence, rural development schemes were discussed and formulated at the District, State and National level without the participation of rural people. This ignored core local issues and the requirements of the particular area. As a result, these cost-intensive rural development schemes were unable to achieve their objectives. After planners and policy-makers realised the shortcomings of this type of planning, they resolved to compulsorily enlist the participation of the people involved in the developmental schemes being carried out in their villages through a **Participatory Rural Appraisal** (PRA). This procedure, that has now become the key document for any rural developmental work, ensures the people's understanding of their problems and helps in devising solutions that can be implemented by them. People's participation in rural projects increases their scope, stability and success rate.

Rural participatory programmes succeed in bringing all sections of society - including women and landless labourers - to a common meeting ground, where villagers are apprised of their problems; educated about the rural development project, and their need for the project to alleviate their problems. This further ensures a surge of voluntary participation by them. The objective of the PRA is to gain the confidence of the villagers, who will then divulge basic information regarding local conditions relating to farming, schools, wells, ponds, flora & fauna, roads, forests, and a variety of other data that can help in devising solutions to their problems.

Basic information about the village, Patna Kala, was collected from the Agriculture Department, Panchayat Office, the *Patwari* of the Revenue Department, the Veterinary Officer, and Gyan Singh, the most recognized person in the village. The information on geographical coordinates, demographic pattern, community categorization, occupational distribution of each family, agricultural scenario, water resources, animal husbandry, etc., were collected.

The village of Patna Kala is a tribal village located in the Patna Khurd Panchayat and situated in the ravines near Majhgawan, a little known block in Satna district of Madhya Pradesh. The village of Patna Kala is said to be over 500 years old. It is believed that the village was earlier located 4 km north of its current location in a place called Amhe that no longer exists. It is said that a cholera epidemic swept the village and forced the villagers to abandon its old location and shift to its current location. Due to the availability of water, a core group of Amhe villagers decided to settle at the current location and thus the village of Patna Kala came into existence. Many villagers from surrounding villages, whose ancestors fled the epidemic but settled elsewhere, also claim ancestry from the village of Amhe.

Village Profile

Village	Patna Kala
Block And Tehsil	Majhgawan
Location	10 Km Southwest of KVK
Population	480
Scheduled Castes (SC)	41
Scheduled Tribes (ST)	433
Other Backward Classes (OBC)	06
Total farm families	83
Farm families Below Poverty Line	68
Big farmers	00
Small farmers	35
Marginal farmers	35
Landless farmers	03

The total population of the village is 480 and average family size 5.78 members.

FARM FAMILIES AND THEIR DEMOGRAPHIC COMPOSITION IN THE SELECTED VILLAGE

No. of families	Male (nos.)	Female (nos.)	Children (nos.)	Total	Av. Members /family
83	141	127	212	480	5.78

Village Transect

After collecting the basic information about the village, the transect walk of the village with all the socially recognized people in the village, was conducted to identify, understand and study the village in its entirety. This includes major land use, topography studies, mapping of water resources, soil type, crops grown, trees and shrubs, livestock, as well as the problems and opportunities for development in the village. The village transect is presented below:

- Soil type : Red Sandy Loam to Loam
- Water Resources : Seasonal *Nalas* and wells
- Crops : Sorghum + Pigeon Pea, Kodo Paddy, Wheat, Barley + Gram
- Vegetables : Nil
- Trees and Shrubs : Neem Babul, Mahua, Ber, Peepal, Mango
- Animals : Cattle, Buffalo and Goat
- Land Use Pattern : Houses, crops and animals
- Problems : **Health**
  : Poor sanitary system
  : Unsafe drinking water
  : Malnutrition and under-nutrition
  : High mortality rates
  : Anaemia
  : **Education**
  : Children not attending School

: High adult illiteracy leading to superstitions
: **Social**
: Child marriages
: Child labour
: Open grazing (*Arra Partha*)
: **Income Generation**
: Rain-fed farming
: Poor quality Seed
: Traditional farming practices
: No value addition to forest/farm produce
: Lack of non-farm sector Income
: Poor genetic potential of livestock
: Poor management practices
: No veterinary aid centre

- Opportunities : **Health**
: Sanitary programmes
: Awareness and motivation programmes
: Nutritional Kitchen Gardens
: Knowledge of locally available herbs for minor ailments
: Waste utilization
: **Education**
: Motivation of parents
: Social
: Motivation and education of villagers
: **Income Generation**
: Rainwater harvesting and recycling
: Crop diversification
: Quality seed production
: Up-gradation of livestock
: Formation of SHGs
: Skill development for income generation

Soil and Hydrology of village:

The soil in the village is mostly sandy loam. Seasonal *nalas* flow on the two sides of the village, opening the scope for water harvesting through construction of check dams and diverting the flow of water towards cultivable land through channels. The villagers also admitted that if the water in the seasonal *nalas* is diverted towards the village through construction of an irrigation channel, most of the land in the village can be brought under irrigation. Thus, the villagers were made to realize that the water scarcity in the village is the root cause of their poor economic condition.

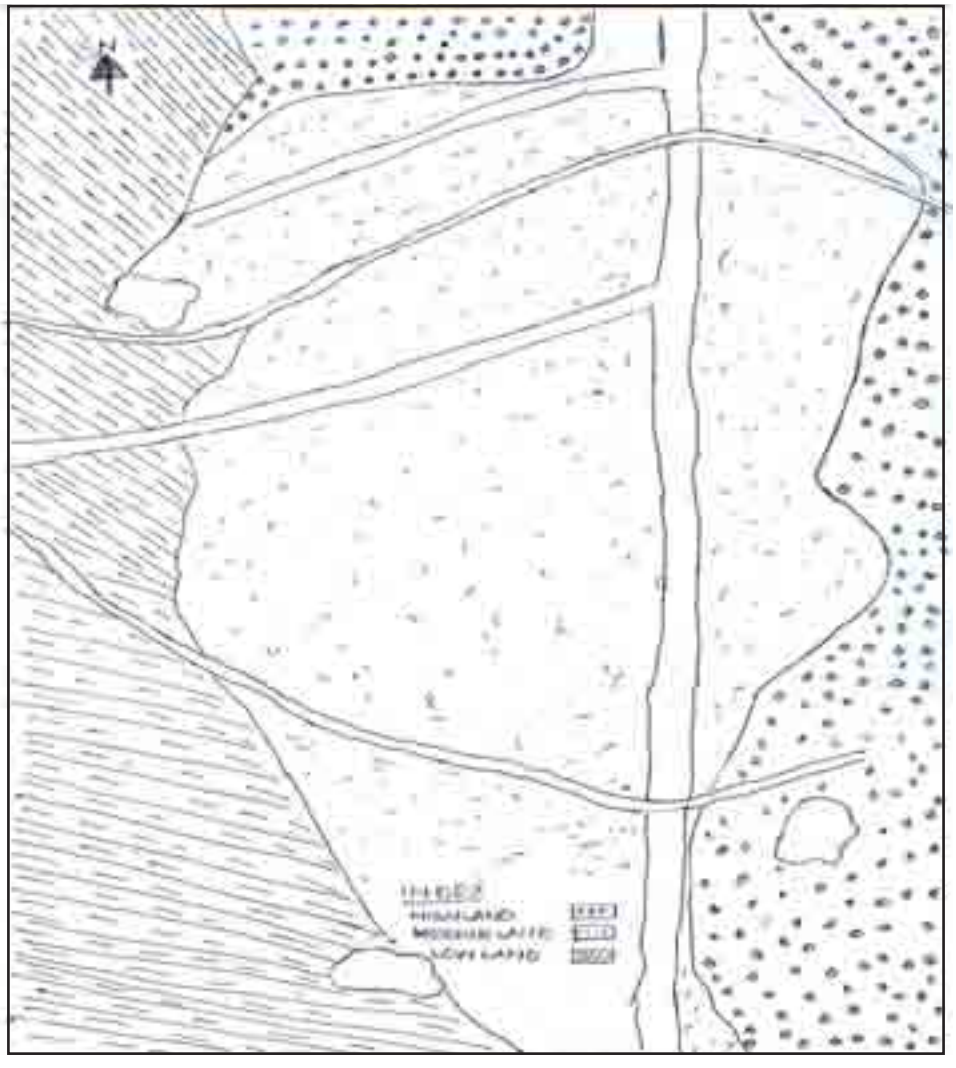
Agro-ecosystem map

To understand and study the micro-ecological features in the village, the information on meteorological parameters like rainfall, temperature, major flora & fauna of the village; basic land use patterns, such as cropping, forest cover, wasteland, livestock; other natural resources like soil type, water sources (wells, water channels, ponds); and other public amenities and their use in the village are required. All this information is depicted in a map made by the villagers. This map helps in the preparation of perspective planning for the village's development.

The maximum rainfall occurs during July-September which amounts to around 830 mm. Average temperatures range from 3^0 C - 45^0 C. The household areas, agricultural fields and pasture cover the maximum portion of the village. Water remains in the seasonal *Nalas* from August to mid-October.

Wheat is the major crop cultivated during *Rabi* season and it covers around 129.5 acres. Paddy is the main crop of *Kharif* season. Cows, buffalo and goats are the main animals reared by villagers. Farmyard manure (FYM) is heaped in one place without proper scientific practices.

According to survey, the total cultivated area was 200.0 acres, of which 26.5 acres was irrigated. Most of the farming community were marginal and small landholders. The major crops of the village were sorghum, pigeon pea, paddy, wheat and gram.



Agro-ecosystem Map

Agricultural Scenario of the Village (2002)

Year	2002
Total land (acre)	324.5
Agricultural land (acre)	285.75
Cultivated land (acre)	200.0
Fallow Land (acre)	43
Cultural Wasteland (acre)	38.75
Irrigated (acre)	26.5

Livestock wealth

S.No.	Type of Animal		
		No.	Av. Productivity (l/day)
1.	Buffalo	33	1.5 - 2.0
2.	Cow	232	0.75 - 1.25
3.	Goat	142	0.25 - 0.5
4	Sheep	02	
5	Bullock	122	

Resource map

Thereafter, the resource map was drawn by the villagers depicting land resources, crop and crop based resources, trees, fruit trees, livestock, public amenities, water resources, types of houses, farm implements that were available, communication equipment, etc.

a) Land Resources

The total geographical area of the village is 324.5 acres of which the residential area covers only 34.5 acres and cultivated area is around 200 acres. In the cultivated area, irrigation facilities are available in 26.5 acres.

b) Crops and crop-based resources

Wheat is the main crop grown during *Rabi* season and it covers around 129.5 acres. However, wheat productivity at 4.20 q/acre, is very low (National Average: 11.2 q/acre). The next most important *Rabi* crop is

chickpea, with 31 acres of land under cultivation. Paddy is the main crop grown during *Kharif* covering around 82 acres. However, productivity is only 3.35 q/ acre (National Average: 10 q/acre).

Area and Productivity of crops grown in the villages

Crop	Area (acre)	Av. Productivity (Q/acre)
Paddy	82	3.35
Pigeon Pea + Sorghum	5.5	2.0
Wheat	129.5	4.20
Barley	13.5	2.96
Chickpea	31	2.61
Mustard	6.5	1.46

c) Trees with economic value

Mahua, Babul, Neem, Arjun grow in the village.

d) Fruit Trees

Ber. Mango, Guava and Lemon were found growing near village homes. No fruit orchards were seen in the village.

e) Animal Resources

The village has 232 *desi* cows, 33 buffaloes, 122 bullocks and 142 goats. Scientific management of livestock is completely lacking. The milk productivity is also quite low.

f) Public Amenities

There is pasture land on two sides of the village covering about 10.5 acres. The other public amenities include a temple and water harvesting bund constructed by the forest department.

g) Government Institutions

There is one 5th standard school and a post office.

h) Water Sources

The only source of irrigation is wells. There are three wells from which the water is drawn by pumps. There are also seasonal *nalas* flowing on two sides of the village that provide water from August to October.

Village Enterprises

Farming in the village is rain-fed. The production from the land was insufficient to meet family requirements. So, to supplement their family income they engage in seasonal labour work - collection and selling of firewood and forest produce. As labourers, each family earns about Rs 400-500 per month. 68 farm families were below the poverty line (having family income less than Rs. 18,000 per annum). Only 15 farm families with an alternate source of income in addition to agriculture - through government jobs and remittances receiving through relatives who have migrated - were above the poverty line.

By and large each family has 4-5 livestock (cows, buffaloes, bullocks and goats). Milk production is very low in the village as most of the cows and buffaloes are of traditional breeds, with unproductive yields and poor health.

Main crops of the *Kharif* (July-November) season were paddy, sorghum and kodo; and during the *Rabi* (November-March) season were gram, barley and wheat. Farmers were following Paddy-Wheat; Fallow-Wheat; Fallow-Gram; Paddy-Fallow; Sorghum + Kodo + Paddy mixed cropping.

Livestock is totally dependent on grazing in nearby forest areas and wastelands round the year. There is also a great social constraint which is known locally as *Arra Pratha* (free grazing of animals)like other villages of the region .

Income-Generating Enterprises

A majority of the farm families in the village are marginal farmers, having less than 2.5 acre land. These farm families derive their subsistence through agriculture, labour and forest produce collection. Landless families are generally daily wage labourers. Small farmers have agriculture and livestock as their enterprises.

Seasonal Calendar

PARTICULARS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
AGRICULTURE												
LIVESTOCK												
FOREST PRODUCE COLLECTION												
MIGRATION OF FAMILIES												

SEASONAL CALENDAR OF LIVELIHOOD ACTIVITIES

Thereafter, the seasonal calendar of the activities performed by the villagers through the year was prepared. It shows the seasonal work flow of the villagers.

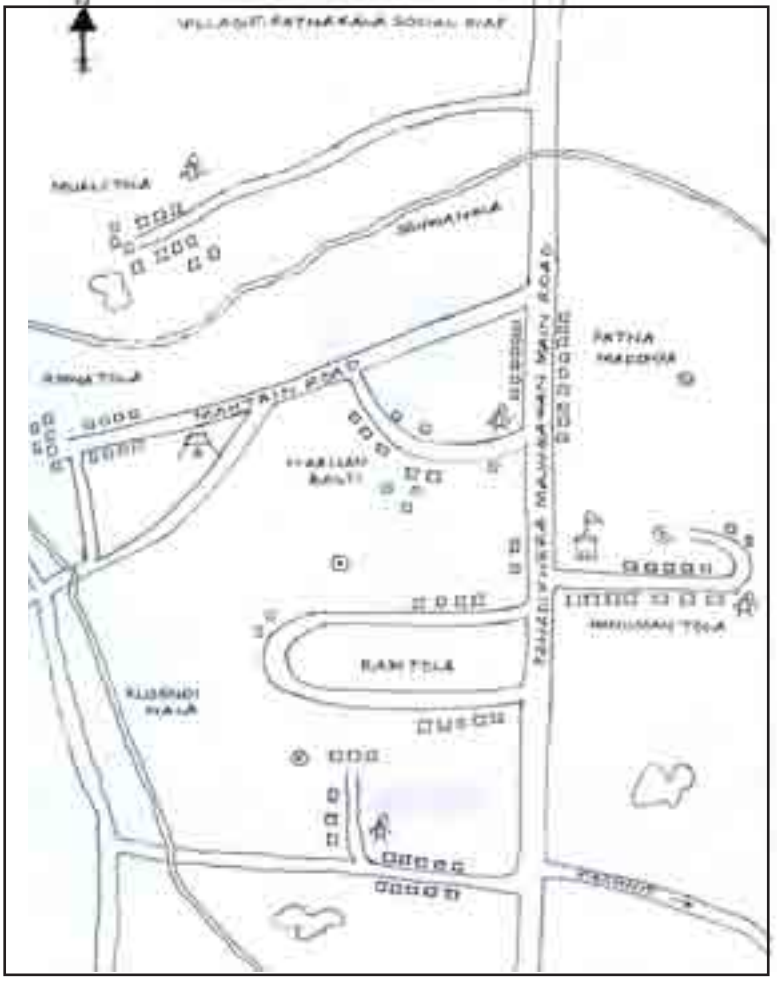
Gender Segregated Seasonal Calendar

The information pertains to specific tasks performed by men and women in the village. This helps in establishing the participatory level of men and women in various activities and village level programmes.

Seasonal Analysis

To discover if the village suffers from cyclical diseases and other related problems, seasonal analysis of information when diseases occur was collected, for both humans and livestock. Conditions and problems with farming were also gathered.

Social Map



83 farm families live in 81 houses made of stone, wood, earthen materials and thatch. The village is spread over an area of 1.5 km in length and 1 km in breadth. The village is divided into 6 hamlets, namely Amha Tola, Murli Tola, Patna Madhya, Harijan Basti, Ram Tola and Hanuman Tola. The farm families are mainly from the tribal community. Out of 83 farm families, 75 are of scheduled tribes (ST), 6 are of scheduled caste (ST) and two of other backward classes (OBC). The village has electric supply but due to the poor economic condition of people, the facility is used by only 3-4 resourceful families.

The village has one 5th standard school for boys and girls. The temple is located on one side of the village. The village has a network of trails approaching the main road and inside the village. Most of the women in the village are engaged in collection of fire wood from the forest, and selling in the nearby Majhgawan market.

The village is connected with a *kachha* pathway, which gets washed away whenever it rains. When this occurs, the villagers are forced to take an alternate route - a walk through the hills for 10 km to reach the nearest weekly *haat*, Majhgawan, as the weekly markets is known. The Payaswini River is located 15 km away, and Chitrakoot, Lord Rama's place of exile and *'Karma Bhoomi'*, is at a distance of 45 km. The main deity of the village is 'Badhe Dev Baba', and his main temple is 24 kms away. The villagers often go on pilgrimages to these 3 places.

On the North of the village is the village of Patni, a distance of 6 km, and 7

km to the South is Village Kelhaura, another village selected as a *Swavlamban* Kendra (Self-Reliant Village). The village has degraded forest cover on its East and West sides.

Timeline and Trend

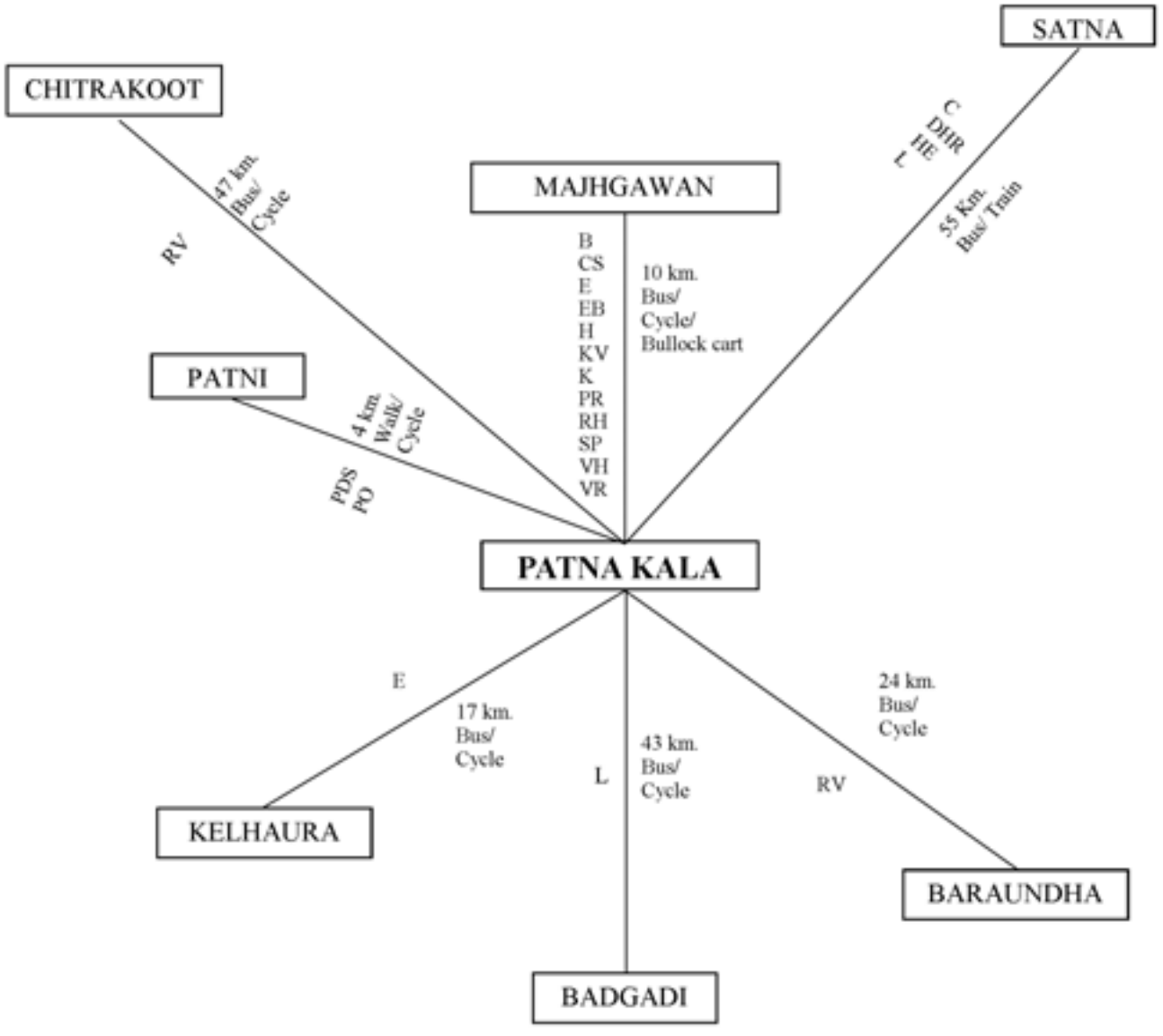
A timeline of the development of the village is given below.

1500s	: Establishment of Patna Kala village
1927	: Establishment of temple
1968	: 1st Bicycle in the village
1970	: Severe Drought
1972	: 1st Radio in the village
1978	: 1st Primary School started
1985	: 1st Hand pump
1989	: Electricity connected to the village
1997	: 1st Bore well in the village
2000	: 1st TV in the village
2001	: 1st Tractor in the village
2002	: 1st Thresher in the village
2002	: 1st Seed drill in the village

Mobility Map

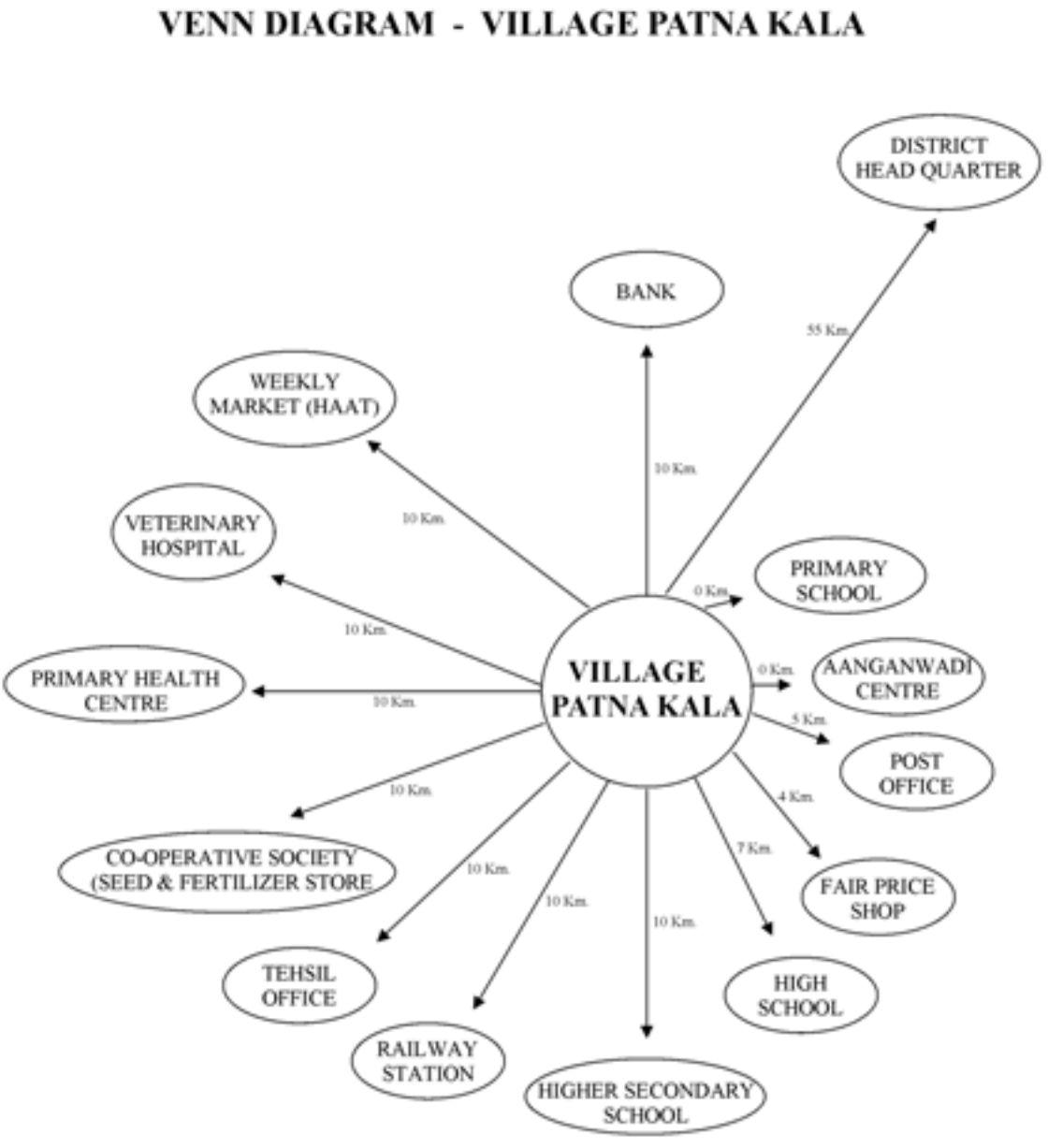
The mobility map prepared by villagers indicates that all the villagers frequently visit Maghgawan to purchase household goods, medicines and agricultural inputs; and Satna (the district headquarters) for administrative work and medical treatment. They also go Maghgawan for higher studies.

MOBILITY MAP : VILLAGE PATNA KALA



B	-	Bank
C	-	Court
CS	-	Co-operative Society
DHQ	-	Distt. Headquarter
EB	-	Electricity Board
H	-	Health
KVK	-	Krishi Vigyan Kendra
L	-	Labour
PR	-	Provisions
P	-	Panchayat
PDS	-	Public distribution system
RH	-	Referral Hospital
SP	-	Selling of Produce
VH	-	Veterinary Hospital
VR	-	Vehicle Repair
RV	-	Religious Visit

Venn Diagram



A Venn diagram was prepared to understand the relationship of villagers with local institutions and enterprises in the area.

Wealth Ranking

The villagers were placed in different categories - namely, 'above the poverty line' and 'below the poverty line' on the basis of the perception of the villagers. This assumed that they have some knowledge regarding their neighbour's financial condition. The common criteria identified for wealth ranking in Patna Kala village were landholdings, livestock, and other sources of income (i.e. remittances received from relatives that had migrated for government or private jobs).

DISTRIBUTION OF FARM FAMILIES ACCORDING TO SIZE OF HOLDINGS (Acre)

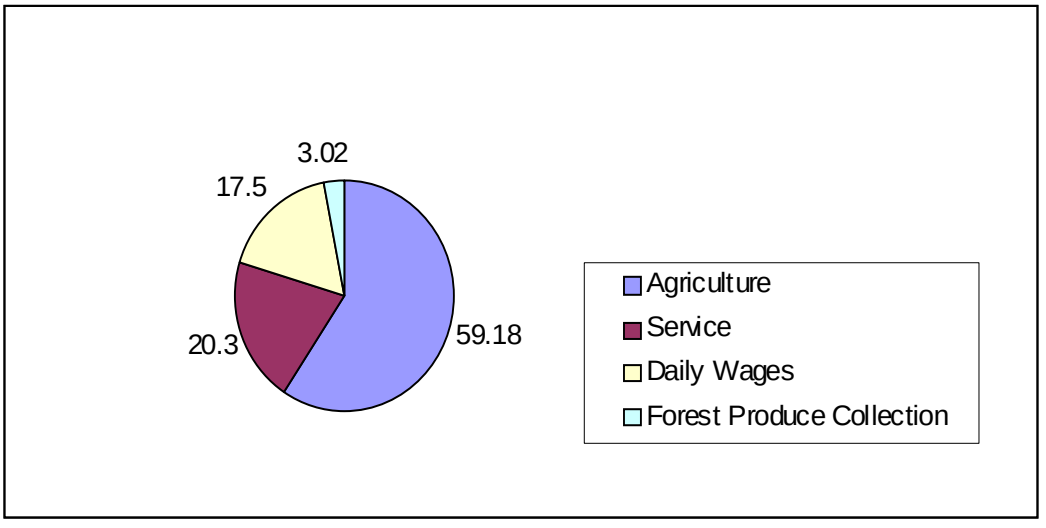
Landless (nos.)	Marginal (nos.)	Small (nos.)	Big (nos.)	Total
13	35	35	0	83

Landless - 0 acre; Marginal - less than 2.5 acre; Small - 2.5-12.5 acre; Big - above 12.5 acre

Livelihood Analysis

A livelihood analysis of the village was conducted to find out the degree to which the pattern of life differs in terms of family size, size of landholdings, type of house, annual income, type of farming, etc.

Percent Contribution of Source of Income to Family Livelihood



Problem identification

The problem identification exercise is done to identify the real problems faced by the villagers. During the PRA, the villagers identified the following problems/constraints affecting the development of the village.

- Rain-fed farming (Lack of irrigation facilities).
- Fallow/cultural wastelands.
- No alternate source of income (Migration of farm families to towns/cities).
- Low productivity of crops.
- 70% land mortgage.
- Uneconomic land holding.
- Low livestock productivity.
- Lack of economic enterprises.
- Lack of motivation for self-employment.
- No value-addition to farm or forest produce.
- Lack of skill and knowledge.
- Unhygienic living conditions.
- Unsafe drinking water.
- Malnutrition and under-nutrition.
- No birth control – Constant pregnancies as high infant mortality rate.
- Unhealthy habits.
- Seasonal migration of farm families.
- Unreliable schools.
- Child marriages.
- Open defecation in public areas.
- Unhygienic conditions near drinking water source.
- Lack of awareness of health/hygiene issues.
- *Arra Pratha.*
- Immature behavior and jealousy.
- Self-centered and superstitious behavior.

Questionnaire (Family Survey)

1. **Village Name** Patna Kala
   a. Panchayat Patna Kala
   b. Block Mazhgawan
   c. Tehsil Mazhgawan
   d. District Satna
   e. Postal address Patna Kala
   f. Pin code 485331

2. Name of the Head of the Family Sri Bhoora Singh.
   Total members in family 7
   Caste ST

Family Members Details

Sr No	Name	Father's Name	Mother's Name	Relation with head	Age	Sex	Physically Fit/Unfit (with Cause)	Educational Qualification	Inclination towards self employment	Name of Occupation	No of Days employed	Income	Awareness about the Village	Participation in Gram Sabha Meeting
1	Bhoora Singh	Narayan Singh	Pyari	Self	45	M	Fit	Illiterate	Goatary farming	Labor	150	6000	Yes	Yes
2	Ram Rati	Bhoora Singh		Wife	40	F	Fit	Illiterate					Yes	Yes
3	Sitaram Singh	Bhoora Singh		Son	25	M	Fit	Literate	Goatary		150	4500	Yes	Yes
4	Radhey Singh	Bhoora Singh		Son	16	M	Fit	6th			150	5000	Yes	Yes
5	Gudiya	Bhoora Singh		Daughter	13	F	Fit	5th						
6	Seeta	Bhoora Singh		Daughter	22	F	Fit	Illiterate	Tailoring					
7	Premvati	Bhoora Singh		Daughter	4	F	Fit	3rd						

Total Income Rs. 15500.00

3. **Land Holdings (In Acres)** 2.00

a. Irrigated area 2.00

b. Cultivable area 2.00

c. Orchard / No of plants & type Lemon -1, Ber-1

4. **Irrigation Facilities**

a. Canal —

b. Tube well —

c. Ponds —

d. —— —

e. River/ Nala ✓

5. **Crop Productivity & Its area**

Sr No.	Crop	Area In Acre	Productivity (Quintal per acre)	Total production	Quantity consumed	Quantity sold (quintal and Rs)	
1.	Paddy	—	—	—	—	—	—
2.	Jwar	—	—	—	—	—	—
3.	Til	—	—	—	—	—	—
4.	Pegionpea	—	—	—	—	—	—
5.	Wheat	1.00	6.00	6.00	3.00		4800
6.	Barley	1.00	2.00	2.00			1200
7.	Gram	—	—	—	—	—	—
8.	Mustard	—	—	—	—	—	—
9.	Lin Seed	—	—	—	—	—	—
10.	Vegetable/Spices	—	—	—	—	—	—
11.	Others	—	—	—	—	—	—

1. **No of Animals:**

Sr No.	Animals	No of Animals	Breed	Production per animal	Qty consumed	Quantity sold
1.	Cattle	3		0.500		
2.	Buffalo	—	—	—	—	—
3.	Goat	—	—	—	—	—
4.	Sheep	—	—	—	—	—
5.	Pig	—	—	—	—	—
6.	Poultry Birds	—	—	—	—	—
7.	Bullock	2	—	—	—	
8.						

2. Agricultural Equipments

a. Tractor	Yes ☐	No ☑	
b. Thresser	Yes ☐	No ☑	
c. Seed Drill	Yes ☐	No ☑	
d. Sprayer	Yes ☐	No ☑	
e. Duster	Yes ☐	No ☑	
f. Diesel engine	Yes ☐	No ☑	
g. Any others name ———	Yes ☑ Bull Plough	No ☐	if yes Specify the

3. Entertainment Facilities

a. Television	Yes ☐	No ☑	
b. Radio	Yes ☐	No ☑	
c. Tape recorder	Yes ☐	No ☑	
d. Games	Yes ☐	No ☑	
e. Any others (specify)	Yes ☐	No ☑	----------

4. Transport Facilities

a. Car / Jeep	Yes ☐	No ☑
b. Motor Cycle/Scooter	Yes ☐	No ☑
c. Cycle	Yes ☐	No ☑
d. Bullock cart	Yes ☐	No ☑

5. Source of Drinking Water and it's distance from house

a. Hand pumps ☑ b. Wells ☑ c. Tube well ☐ d. Supply water ☐ e. Any other ☐
Distance—50 Mtr Distance 50 Mtr Distance — Distance — Distance—

6. Methods of Medical Treatment

a. Allopathic ☑ b. Ayurvedic ☐ c. Traditional ☐
d. Jhad-Phook ☑ e. Others ☐

Preference

1. — A
2. — D
3.
4.
5.

7. Disputes:

Type of Disputes	Yes	No	Registered	Not Registered	Period of dispute
Family Disputes		✓	—	—	—
Revenue Disputes		✓	—	—	—
Fouj Dari		✓	—	—	—
Any others		✓	—	—	
					—

8. Condition of Houses

a. Katcha ☑ b. Pakka ☐ c. Kacha Pakka both ☐ d. Hut ☐

Facilties available in the house (if available mark √in the box)

a. Toilet ☐ b. Drainage ☐ c. Soak pit ☐ d. Cattle shed ☑
e.composed pit ☐ f. NADEP ☐ g. LPG Gas ☐ h. Biogas ☐
i. Solar (cooking system) ☐ j. Telephone ☐ Electric Connection ☐

14.Nutritional Kitchen Garden

Available ☑ Not Available ☐

15.Name of persons in family suffering from serious diseases

Sr no.	Name	Age	Sex	Name of Diseases	Suffering time (Chronicity)	Treatment taken from (Village/city)
	—	—	—	—	—	—
	—	—	—	—	—	—
	—	—	—	—	—	—
	—	—	—	—	—	—
	—	—	—	—	—	—
	—	—	—	—	—	—

16. Knowledge about folklore medicine (Family Members Name)

Name of the person	Name of the plant		Uses of the plant
	Local	Botanical	
Bhoora	Tulsi		Fever
	Gaduchi		

17. Health program implemented

a. Vaccination during pregnancy

i. Yes ☐ ii. No ☑

b. Children Vaccination

i. Yes ☐ ii. No ☑

If yes, Schedule of Vaccination a. Completed ☐ b. Not Completed ☑

c. Awareness about Family Planning

i. Yes ☐ ii. No ☑

If yes, Contraceptive method applied or not

i. Applied ☐ ii. Not Applied ☑

18. Children Data:

No. Of birth during last 3 years	No. Of deaths of infants during last 3 years	No. of mal-nutritioned children adult
—	—	—

Malnutrition Data of children /adult

Sr.No.	Name	Sex (M/F)	Age	Height (feet)	Weight (kg)	Cause / Disease

19. **Availability of Guduchi & Tulsi plants**

a) Tulsi
i. Available ☑ ii. Not Available ☐

b) Guduchi
i. Available ☐ ii. Not Available ☑

20. **No of family members who don't have Proper clothes.**

a) Wearing 0
b) Bedding 0

21. **No of Family member who are not getting 2 times Meal daily.**

0

22. **How many family members migrated outside for employment**

a) Permanent
b) Seasonal 1
c) According to need

23. **Taken Training details**

Sr no.	Family Members Name	Type of Training / Skill	Training Institute	Passing year

Village Survey done on 21/05/2002

1. Name of village : **Patna Kala (**Murli Tola, Patna Madhya,Harijan Basti,Amha Tola, Hanuman Tola, Ram tola)
   - Panchayat : Patna Khurd
   - Block : Majhgawan
   - Tehsil : Majhgawan
   - District : Satna
   - State : Madhya Pradesh

2. Population : 480

Total Family : Patna Kala -83

- Total member

a. Men	:	141	
b. Women	:	127	
c. Male child	:	109	
d. Female child	:	103	
e. S.C.	:	6 (41)	
f. S.T.	:	75 (433)	
g. O.B.C.	:	2 (6)	
f. General	:	0 (0)	
i. Religion			
i. Hindu	:	All	
ii. Muslim	:		
iii. Christian	:		
iv. ————			.....
v. ————			.....

3. No. of Farm Families : 83
   - a. Big : 00
   - b. Small : 35
   - c. Marginal : 35
   - d. Landless : 13

4. No. of families possessing

a. Huts	:	02
i. Normal	:	01
ii. Critical	:	01
b. Mud House (*Kachcha*)	:	81
c. Brick House (*Pakka*)	:	0
d. *Kacha-Pakka* both	:	01

5. Availability of approach roads and internal lanes and its condition

Approach road	:	Yes
Condition	:	Not Good
Internal Lanes	:	Yes
Condition	:	Poor (Murli Tola in Patnakala)

6. Availability of infrastructure
   a. School

i. Primary School	Yes	In the village

ii. Junior School	No	10 km from the village
iii. High School	No	10 km from the village
iv. Intermediate School	No	10 km from the village
v. Others		
b. No of students	79	
i. Boys	48	
ii. Girls	31	
c. Playground	No	
d. Panchayat Bhavan	Yes	3 Km from Patna kala
e. Shradha Kendra	Yes	
f. Post office	Yes	
g. PHC./Health facility	No	In Majhgawan (10 Km)
h. Bank	No	In Majhgawan (10 Km)
i. Electrical facilities	Yes	
j. Wells	Yes	2
k. Ponds	No	
l. Hand pumps	Yes	2
m. Tube wells	No	

7. Other Educational facilities and types (like *anganwadi*, etc)
Yes

8. Type of drainage system

a. Earthen drain	—	Yes
b. Masonry drain	—	Nil
c. No of soak pits	—	Nil

9. Cultivable Land - 200.00 acre Irrigated - 26.5 acre Rain-fed - 173.5 acre

Average crop productivity

S.No.	Crops	Area under crops (acre)	Production (Quintal/acre)
1.	Jowar + Pigeon pea	5.2	2.35 +2.0
2.	Paddy	82	3.35
3.	Wheat	129.5	4.20
4.	Gram	31	2.61
5.	Barley	13.5	2.96
6.	Mustard	6.5	1.46

10. No. of BPL families (income less than Rs. 1500 per month)- 68

11. No. of traditional occupations

a.	Barber	:	Nil
b.	Pottery	:	Nil
c.	Leather worker	:	Nil
d.	Carpentry	:	05
c.	Folklore medicine	:	02

12. No of boys and girls (5 to 14 years) don't go to school : 28

a. Boys : 08
b. Girls : 20

13. No. of Fruit Trees

Ber	:	13
Lemon	:	03
Guava	:	05
Banana	:	00
Mango	:	09
Jack Fruit	:	02

14. Kitchen Gardens

a.	No. of nutritional kitchen gardens	:	Nil
b.	No. of kitchen gardens	:	24

15. Irrigation facilities available

a. Canal	:	0
b. Tube well / Bore well	:	Nil
c. Ponds	:	0
d. Seasonal *Nala*	:	2
e. Wells	:	2

16. No of animals

Sr.No.	Animals	Number	Breed	Average production
1.	Cow	232	*Deshi*	0.41
2.	Buffalo	33	,,	0.78
3.	Goat	142	,,	0.25
4.	Sheep	02	-	-
5.	Pig	00	-	-
6.	Poultry	0	*Deshi*	-
7.	Bullock	122	,,	-
8.	Fisheries	-	-	-
9.	Others	-	-	-

17. Transportation facility

a. Tractor	:	02
b. Car/Jeep	:	Nil
c. Motor cycle/Scooter	:	02
d. Cycle	:	29
e. Bullock cart	:	08
f. Truck	:	Nil

18. Availability of panchavati Yes

Trees

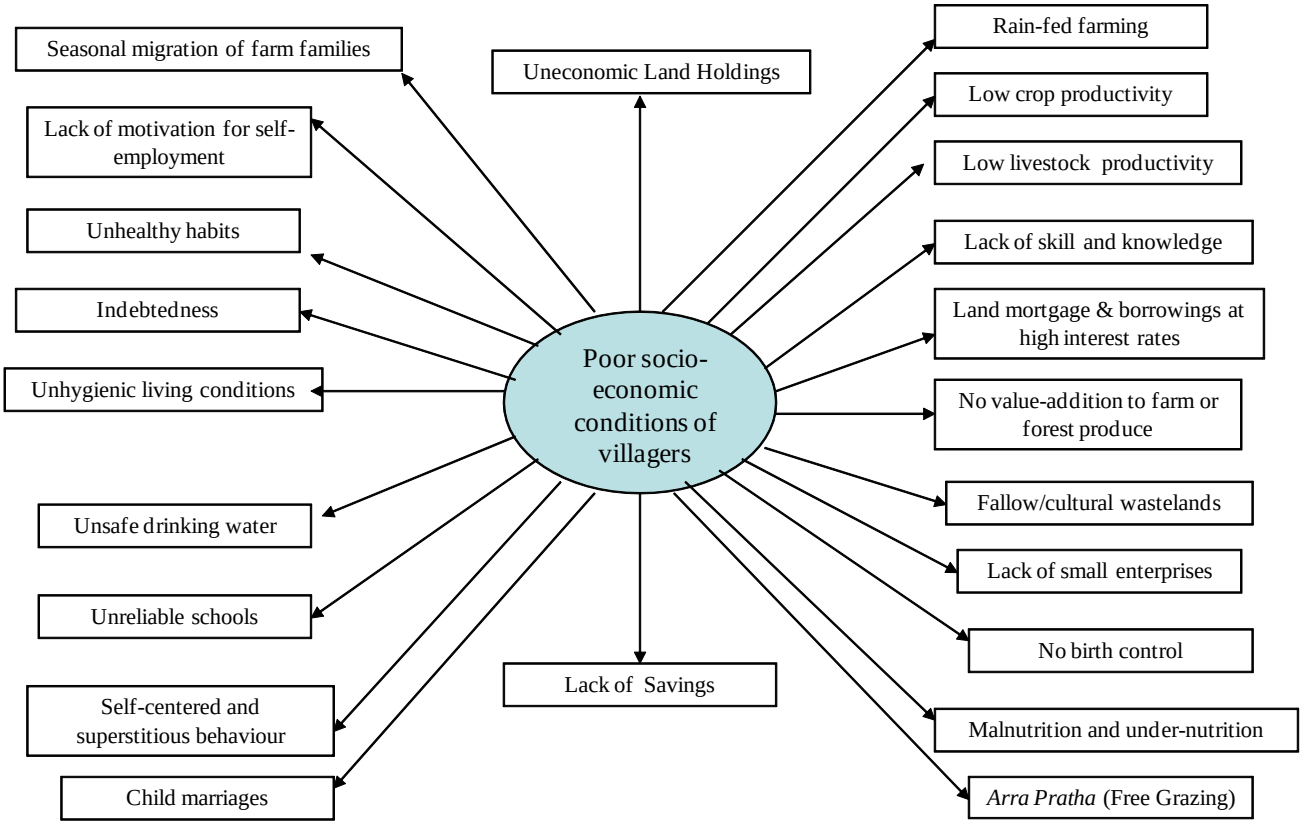
i. Pipal

ii. Banyan
iii. Mango
iv.Aonla
v. Bel

19. No. of families using organic manure
    a. Fully : 26
    b. Partially : 57
20. No. of seed clubs : 0
21. No. of families using agricultural technology
    a. Traditional : 55
    b. (ITK) : 4
    c. New : 11
22. Availability of improved agricultural implements
    a. Tractor : 2
    b. Duster : Nil
    c. Sprayer : Nil
    d. Thresher : 5
    e. Seed drill : 2
    f. Diesel Pump : 6
23. Availability of signboards, information boards and wall writing:
    Signboards : Yes
    Information boards : Nil
24. No. of unemployed rural people : 46
25. No. of Disputes : 6
    Civil (Revenue) : 2
    Criminal (*Fauzdari*) : 1
26. No. of Patients (chronic disease) : 10

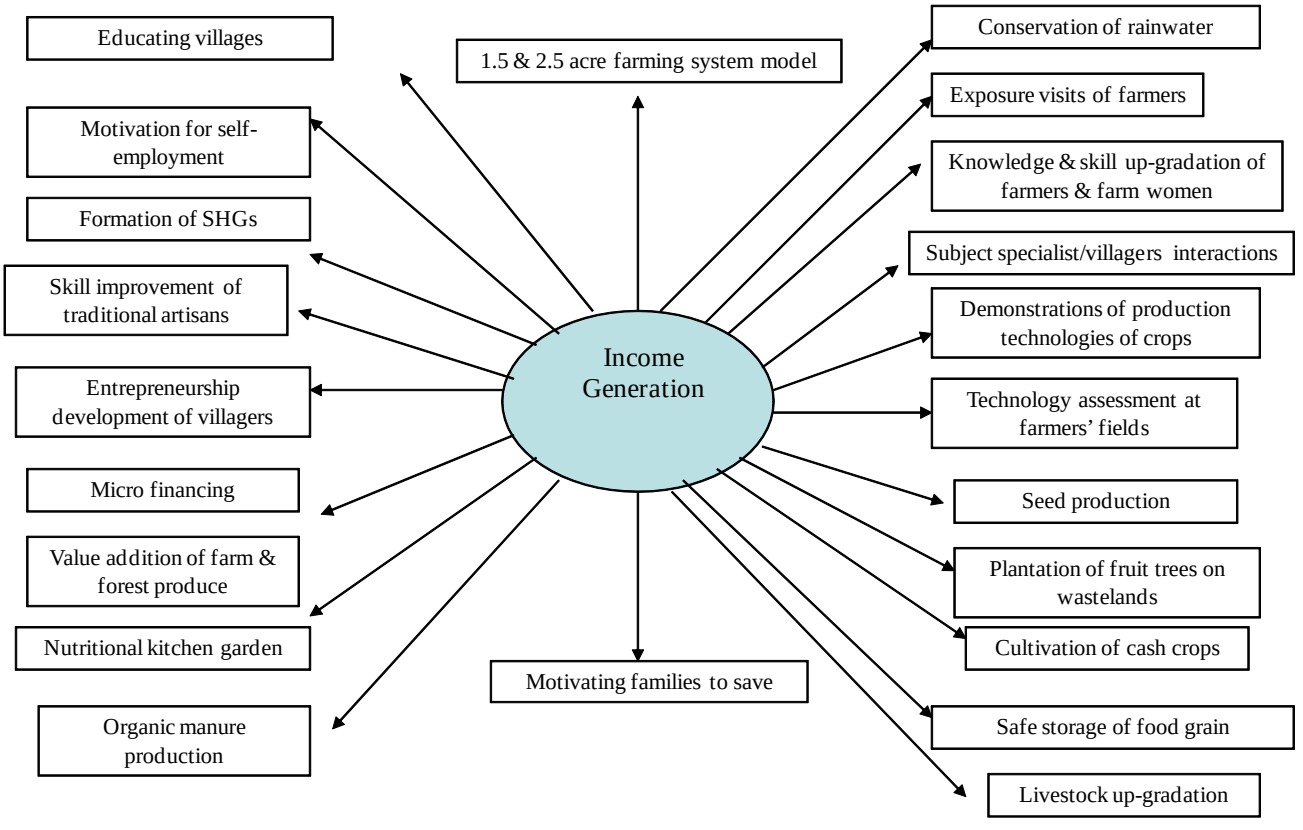
Problem/Cause Diagram

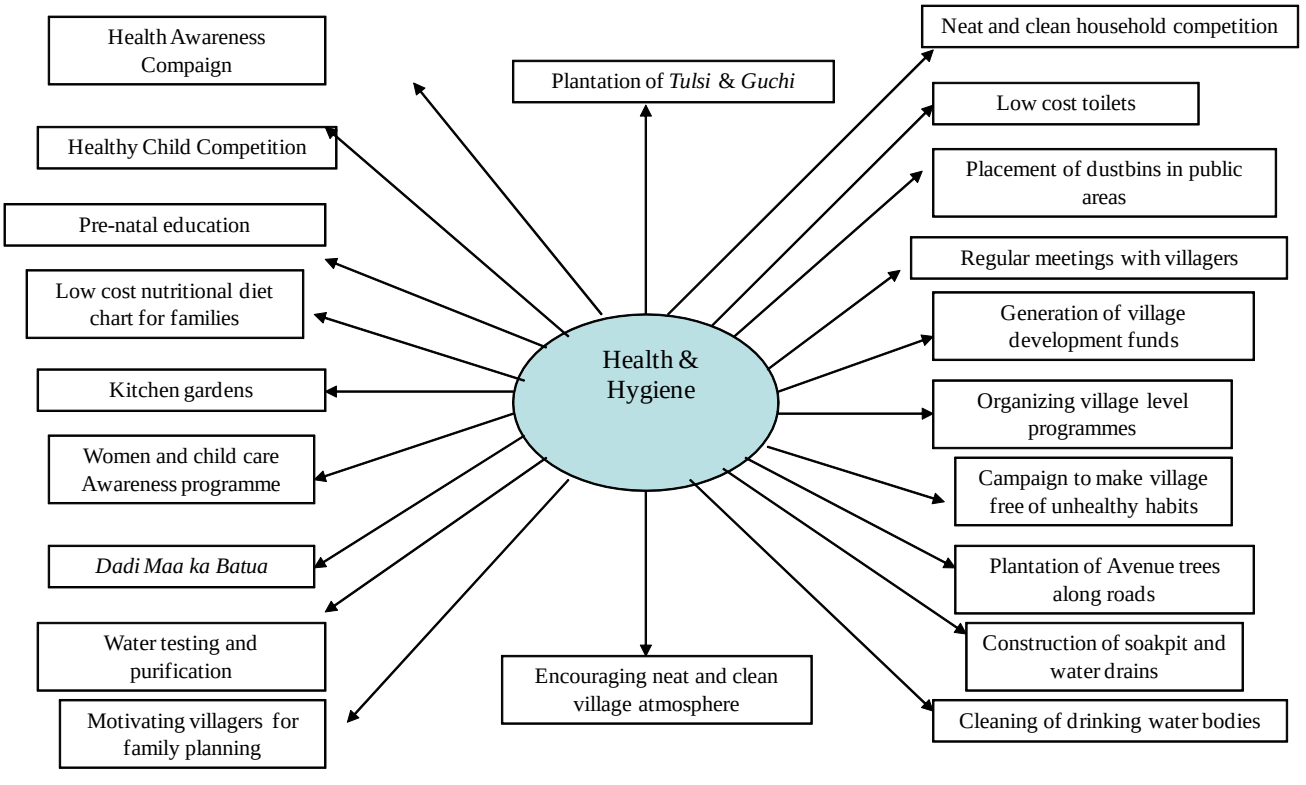
After identifying the problems in the village, the problem/cause diagram depicting the logical reason of the causal factors was drawn.

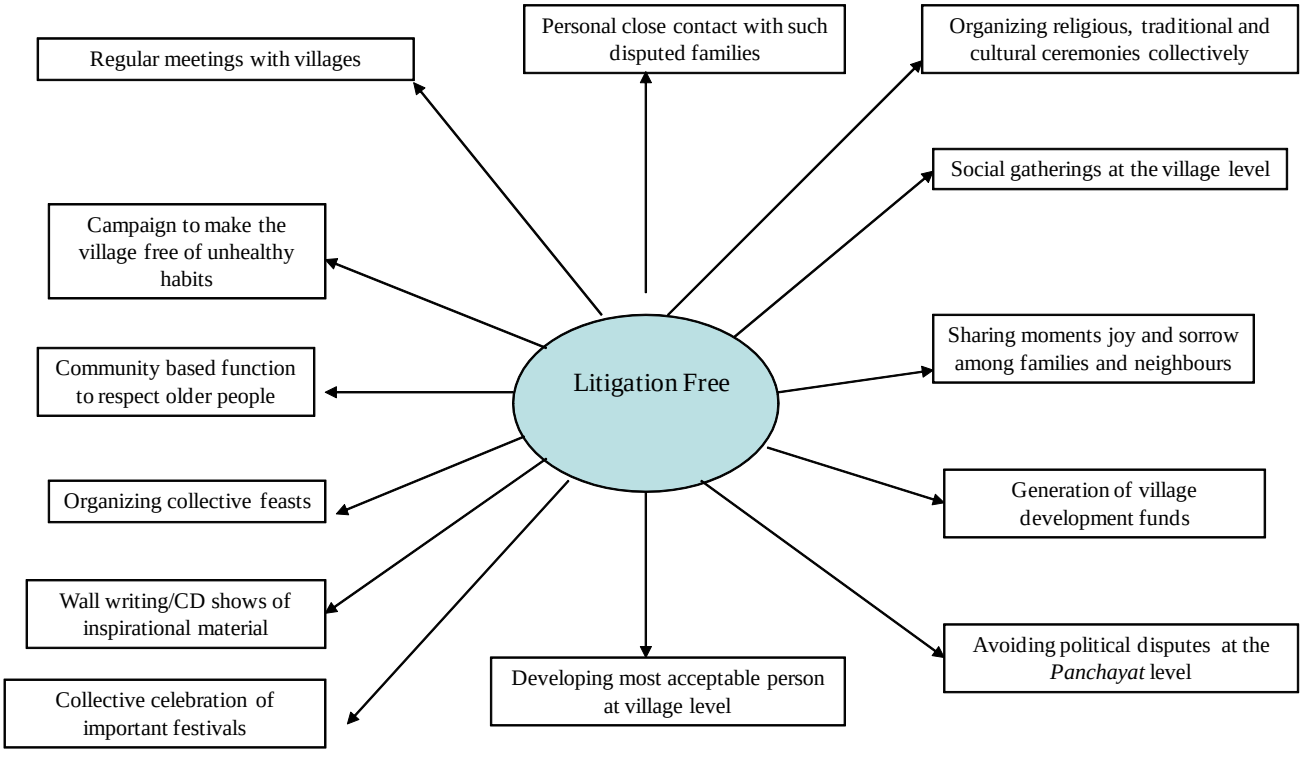


Solution Tree

Finally, the solution tree for addressing the root cause of the problem was developed in consultation with the villagers.






Litigation Free
Regular meetings with villages
Personal close contact with such disputed families
Organizing religious, traditional and cultural ceremonies collectively
Social gatherings at the village level
Campaign to make the village free of unhealthy habits
Community based function to respect older people
Sharing moments joy and sorrow among families and neighbours
Organizing collective feasts
Generation of village development funds
Wall writing/CD shows of inspirational material
Avoiding political disputes at the *Panchayat* level
Collective celebration of important festivals
Developing most acceptable person at village level

ACTION PLAN OF PATNA KALA VILLAGE

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
1	Poverty	Sustainable Development of the Village	Educating farmers. Formation of *Gram Vikas Samiti*	KVK	

Beneficiaries - 70 (Small - 35, Marginal - 35)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	-	-	--	--	35	35	--	--	35	35	--

Implementation schedule -

2004										2005											2006	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
2	Poverty	Improved water availability for drinking and irrigation	Educating farmers through exposure visit to KVK. Motivation of villagers Appropriate methods of rainwater harvesting and irrigation channels	KVK	

Beneficiaries - 70 (Small - 35, Marginal - 35)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	-	-	--	--	35	35	--	--	35	35	--

Implementation schedule -

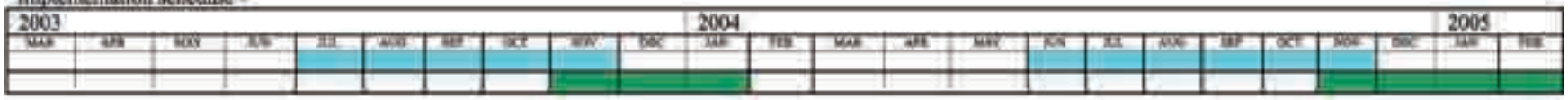
2004										2005											2006	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
3	Poverty	Higher crop production	Scientist/Villagers interactions for crop planning. Use of improved seed varieties & demonstration of production & management techniques for Cereal crops (rice and wheat)	KVK	

Beneficiaries - 42 (Small - 23, Marginal - 19)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	8	5	--	--	7	6	--	--	8	8	--

Implementation schedule -



Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
4	Poverty	Higher crop production	Scientist/Villagers interactions for crop planning. Use of improved seed varieties & demonstrating production and management technology of Pulses (Arhar Blackgram and Chickpea)	KVK	

Beneficiaries - 34 (Small - 14, Marginal - 20)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	-	-	--	--	10	13	--	--	4	7	--

Implementation schedule -

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
5	Poverty	Higher crop production	Scientist/Villagers interactions for crop planning. Use of improved seed varieties & demonstrating production and management technology of Oilseeds (Sesame, Groundnut and Mustard)	KVK	

Beneficiaries - 45 (Small - 21, Marginal - 24)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	4	5	--	--	10	07	--	--	7	12	--

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
6	Poverty	Nutritional Security	Scientist/Villagers interactions for crop planning. Use of improved cultivars & growing fruit trees near houses and on community lands	KVK	

Beneficiaries - 23 (Small - 14, Marginal - 11)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	-	-	--	--	02	0	--	--	12	11	--

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
7	Poverty	Higher crop production	Scientist/Villagers interactions for crop planning. Use of improved seed varieties & demonstrating production and management technologies for vegetables and spices)	KVK	

Beneficiaries - 64 (Small - 32, Marginal - 32)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	4	2	--	--	15	25	--	--	13	5	--

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
8	Poverty	Higher crop production	Scientist/Villagers interactions for crop planning. Cultivation of high value cash crops and seed production at village level	KVK	

Beneficiaries - 64 (Small - 32, Marginal - 32)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	4	2	--	--	15	25	--	--	13	5	--

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
9	Poverty	Higher crop production	Knowledge and skill up-gradation of farmers	KVK	

Beneficiaries - 64 (Small - 32, Marginal - 32)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	36	26	--	--	71	57	--	--	48	58	--

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
10	Poverty	Profitable farming system model	Planning & execution of 2.5 & 1.5 acre model	KVK	

Beneficiaries - 08

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	--	02	--	--	01	02	--	--	--	03	--

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
11	Poverty	Livestock up-gradation (Cattle, Buffalo & Goat)	Provide improved male/A.I facility, Animal health camp	KVK & Goshala	Improved bull (Potent) Frozen Semen

Beneficiaries - Cow - 232, Buffalo - 33, Goat - 142

2003				2004				2005			
Cow	**Buffalo**	**Goat**		**Cow**	**Buffalo**	**Goat**		**Cow**	**Buffalo**	**Goat**	
130	16	84		232	33	142		232	33	142	

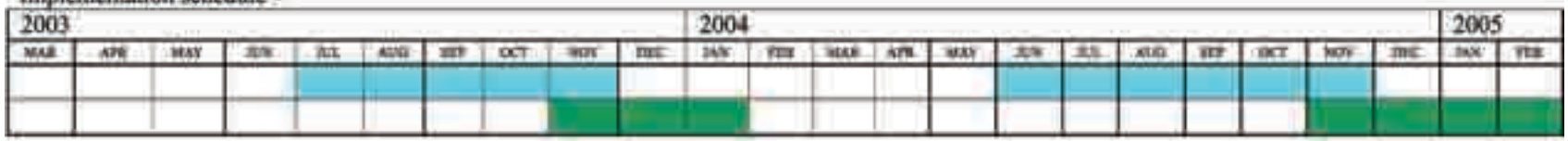
Implementation schedule -

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
12	Poverty	Livestock management	Management of farm animals, feed and fodder production and techniques for preparation of balanced diet for *milch* animals	KVK	Seed

Beneficiaries - 70 (Small - 35, Marginal - 35)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	12	15	--	--	35	35	--	--	35	35	--

Implementation schedule -



Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
13	Poverty	Para vet training	Training on primary health care management, and recycling of waste water and organic manure production	KVK & Goshala	Training Material Fund- Rs. 10,000/-

Beneficiaries - 02

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	01				01						

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
14	Poverty	Income Enhancement	Formation of Self Help Groups (SHGs). Motivating farmers toward small savings. Value addition of farm and forest produce, and improving skills of traditional artisans	KVK	Training material

Beneficiaries - All families

2003	2004	2005
25	25	23

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
15	Poverty	Create model house for the homeless	Low cost housing	UV	

Beneficiaries - 02

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	--	--	-	--	--	--	02	--	--	--	-

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
16	Poverty	Prosperous family	Motivating villagers to use family planning techniques and creating awareness of the ill-effects of unhealthy habits	KVK	Training material

Beneficiaries - All families

2003	2004	2005
25	25	23

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
17	Unemployment	Employment generation	Organizing employment awareness campaigns, motivational camps, rural youths/expert interactions and unemployed rural youth fairs	UV & SSD	

Beneficiaries - Unemployed rural youth (28)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	All un employed rural youths										

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
18	Unemployment	Employment generation	Formation of rural youth committees & Formation of SHGs	UV & SSD	

Beneficiaries - Rural youth

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	All rural youths										

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
19	Unemployment	Employment generation	One village one product (Wheat Flour) through SHGs	UV	

Beneficiaries - 5 (1 SHG)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	2	1	2		2	1	2		2	1	2

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
			TR												TR								

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
20	Unemployment	Employment generation	Skill development in Value addition of available natural resources	UV	

Beneficiaries - 05 (1 SHG)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	3	2			3	2			3	2	

Implementation schedule -

2003										2004										2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
21	Unemployment	Employment generation	Need based income generation training programmes(Vegetable cultivation, goaary, carpentry, tailoring, cycle repairing, forest produce collection, dáry, bricks making , visadkhana, leather work, Diesel engine, Poultry, Threshing, General Store, Tent House, Refreshment centre, entrepreneurship development, micro finacing	UV KVK	

Beneficiaries - 83 farm families

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	10	10	13		10	15			15	10	

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
22	Illiteracy	Awareness creation	Organizing	SSD ERC	Audio visual, posters, banners, religious books etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
For all villagers											

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
23	Illiteracy	To motivate children not going to school and school dropouts	Motivation, classes during villagers leisure time, balsanskar Kendra, balodyan, organizing Parent and Teacher Interaction, holding Classes for Illiterate Children Adult literacy Classes, Organizing Cultural and sports Competitions. Development of better teaching techniques.	SSD	

Beneficiaries -80

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
28 children and 80 illiterate adults											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
24	Illiteracy	Education for 15-40 years men and women	Formation of educational committees, Running Bal sanskar Kendra, Motivational camps for parents and Child Competition, School rallies & Science Fairs, Establishing Library at Village level	SSD ERC Schools	

Beneficiaries - 80

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
25	Good Health	Health awareness programmes	Awareness Camps, Motivation, healthy child competition, women and child care awareness programmes	AD	Audio visual, posters, banners, life saving drugs & books, etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
villagers											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
26	Good health	Health awareness programmes	Formation of health group, motivating villagers towards family planning, educating villagers to keep neet and clean atmosphere in the village	AD SSD	

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
1 group				1 group							

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
27	Good health	Treatment of common ailments and Chronic diseases	Dadi Maa ka Batua, locally available herbs	AD	

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All needy persons											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
28	Good health	Purification of water	Water testing and purification	AD SSD	Water purifying materials

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All villagers											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
29	Good health	Training of TBA	Selection of Dais & training	AD	

Beneficiaries -

2003	2004	2005			
1	1				

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
30	Good health	Lifelong health programmes	Design and development of low cost nutritional diet, household food security by kitchen garden,regular vaccination programmes.	AD Identification of medicinal plants Dadi Ma Ka Batua, AD	

Beneficiaries -

2003	2004	2005
All pregnant women and children		

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
31	Clean & Green	Improvement in village environment	Rallies, neat and clean household competitions, village level programmes at regular intervals, cleaning of water bodies at regular interval	AD KVK SSD	

Beneficiaries -

2003	2004	2005
83 families		

Implementation schedule -

2003				2004																	2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
32	Clean & Green	Improvement in village environment	Plantation of avenues trees along village roads, construction of soak pits and water drains, placement of dustbins in public areas, construction of low cost toilets	KVK SSD	Rs.20,000

Beneficiaries -

2003	2004	2005
83 families (1000 plants)		

Implementation schedule -

2003				2004																	2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
33	Clean & Green	Establishment of nutritional kitchen garden	Awareness creation & providing seedlings of vegetables & fruit plants	KVK	Rs.10,000

Beneficiaries -37 (Small-20 and marginal -17)

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
--	5	7	--	--	5	5	--	--	10	5	--

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
34	No Dispute	Litigation free village	Personal close contact regular meetings of villagers, organizing community base ceremonies to respect the aged persons, social gatherings and *Sahbhoj* sharing each others, joy and sorrows, making village free of unhealthy habits	SSD HQ Ram darshan ERC	Audio visual, posters, banners, religious books etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All families											

Implementation schedule -

2003										2004											2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

35	No Dispute	Litigation free village	Generation of village development funds, unanimous elections at the panchayat level	SSD HQ Ram darshan ERC	Audio visual, posters, banners, religious books etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All families											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
36	Prosperous family	Motivate villagers to go for higher education	Awareness through counselling	ERC	

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
	2	1			4	2			4	4	

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
37	Social consciousness	to maintain the social harmony	Ceremony based on Lord Shri Ram, group celebration of festival and weekly religious gathering	SSD, Ram Darshan Gramodaya Park	Audio visual, posters, banners, religious books etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All villagers											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
38	Social consciousness	To maintain social harmony	Organizing *Sahbhoj*, demonstration of successful experiences through CD shows/ wall writing	SSD, Ram Darshan Gramodaya Park	Audio visual, posters, banners, religious books etc.

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All villagers											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

Sn.	Vision	DRI Output	Activities	Responsibility	Resource required
39	Public amenities	Maintenance of public places i.e. schools, temples, panchayat bhavan, ghat, playgrounds, roads, etc.	Cleanliness, wall writing, notice board, village map, plantation, effort for avoiding enchroachment, formation of village development fund	SSD HQ ERC	Volunteers

Beneficiaries -

2003				2004				2005			
Big	Small	Marginal	Landless	Big	Small	Marginal	Landless	Big	Small	Marginal	Landless
All the villagers											

Implementation schedule -

2003										2004												2005	
MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB

The implentation of the Action Plan involves firstly installing the *Samaj Shilpi Dampati* (SSD) in the village to serve as a fulcrum for all the developmental activities outlined in the Action Plan. With the help of the SSD, the villagers elected a *Gram Vikas Samiti* (Village Development Committee) to help in its implementation. The SSD helped motivate and create a congenial atmopshere, so that all the villagers were ready to work together to improve their socio-economic condition.

Implementation of the Acton Plan

To solve the water problem in the village, DRI volunteers with the villager's initiative, involvement and commitment undertook two activities in the village. The first one was conservation of rainwater and the second was diversion of water from water bodies to farmers' fields.

Rain water harvesting

Details of treatments undertaken

Area (ha)	**Details of Type of Treatment**							
	Contour trenches (No.)	Loose boulder dams (No.)	*Nala* bunds (No.)	Stone dykes (m)	Cattle proof trenches (m)	Farm bunding (ha)	Plantation (No. of trees)	SHGs (No.)
145	2680	78	2	234	67	7	5135	2

Diversion of water to farmers' field

The seasonal *nala* that was about 3 km away from the village became alive with the development of watershed work in the village. But the water available in the *nala* was of no application to the villagers except as drinking water for livestock. With the motivation of *Samaj Shilpi Dampati* (Social Architect Couple), the villagers constructed 2 water channels to take the water from the source to the village. One channel was 1.8 km long and the other 2.1 km. This effort made by villagers themselves, changed the mindset of the villagers towards agriculture, and taught them the benefits of co-operation.

The 1.8 Km Channel built by the villagers' of Patna Kala to bring water to their fields.

Knowledge and skill up-gradation of farmers and farm women

Farmers and farm women of the village were given training on various aspects of crop production, horticulture, livestock production & management, and plant protection measures. Farmers were introduced to improved production technologies, such as selection of best seed variety, seed treatment, sowing techniques, balanced fertilization, weed management, plant protection measures, compost making, and the formulation of balanced rations for milch animals.

Trainings given to improve the skill of farmers

Sr. No.	Particulars	No. of farmers		
		2003	2004	2005
1	Crop Production	12	16	13
2	Vegetable Production	26	47	30
3	Spice Production	0	5	8
4	Fruit Production	0	2	14
5	Plant Protection	0	12	08
6	Animal Science	12	20	18
7	Home Science	12	16	15
	Total	**62**	**118**	**106**

The various training programmes organized for the farmers and farm women on agriculture and allied vocations yielded a visible result. Every training programme led to a substantial change in income. It was interesting to note that the technologies that were economically attractive and involved less investment were adopted more than the technologies that were less economic.

Employment generation training programmes for rural youths

Rural youths were exposed to various income generating enterprises like Para vet, vegetable production, spice cultivation, seed production, goat rearing, raising of horticultural crops in nursery, collection of medicinal herbs, repairing and maintenance of diesel engine and motors, tailoring, value addition of farm & forest produce, etc. to develop entrepreneurship skills.

Training given to rural youth

Sr. No.	Particulars	No. of Participants
1	Para vet	02
2	Gardener Training	01
3	Bio-Pesticides preparation	02
4	Tailoring	06
5	Vegetable Production	05
6	Spice Production	05
7	Identification and collection of herbs	05
8	Value addition of farm and forest produce	05
	Total	**31**

Substitution of improved varieties

Substitution of traditional seed with varieties that were tolerant/resistant to drought, disease and insects were the major interventions for enhancing the productivity of small and marginal farms as they were using seeds of local varieties and getting very low yields. A small investment on improved seed by the farmers has helped them to get substantial increments in yield over local varieties.

Sr. No	Crop	Varieties
1.	**Cereals**	
	Paddy	JR-75,J R-201, JR-345
	Wheat	HD-2329, HD-2285, JW-322. JW-17, JW-3020
2.	**Pulses**	
	Black Gram	PU-30,PDU-1
	Pigeon Pea	Asha, J.A.74, JKM-189
	Chick Pea	Awarodhi, KGD-1168, JG-322, JG-74,JG-16, JG-14
3.	**Oil Seeds**	
	Mustard	Urvashi, JM-1, Varuna, Vardan, NDR-8501
4.	**Vegetables & Spices**	Pant bahar, Pant Samrat, Pant C-1, G-4, Surma, Barua Sagar, VRO-6, IPCRP-2,ADR.

Demonstrations on production & managment technology for crops

The superiority of high yielding varieties and improved production technologies over the conventionally grown varieties and traditional methods of growing was demonstrated to the farmers through frontline demonstrations. 247 frontline demonstrations were conducted covering 70 farmers and 47.5 acres during the years 2003-2005. The frontline demonstration carried out on various crops resulted in a substantial increase in production and total income of the farmers. This was possible due to awareness among the farmers about improved production technologies, such as use of high yielding seed varieties, seed treatment, seeding techniques, balance fertilization, weed management practices, and timely adoption of plant protection measures

The first mustard crop in the village

Frontline Demonstrations conducted on various crops/enterprises

Sr. No	Crop	No. of Beneficiaries			Total
		2003	2004	2005	
1.	Cereals (Paddy, Wheat)	13	13	16	**42**
2.	Pulses (Black Gram, Pigeon Pea, Chickpea)	0	23	11	**34**
3.	Oil Seeds (Mustard, Sesame)	09	17	19	**45**
4.	Vegetable & Spices	06	40	18	**64**
5.	Fruits (Papaya, Aonla, Lemon)	00	02	23	**25**
6.	Kitchen Garden	12	10	15	**37**
	Total	**37**	**105**	**102**	**247**

Livestock up-gradation

To improve the genetic potential of local non-descript livestock in the village, 1 *Murrah* bull for buffaloes, one *Sahiwal* bull for cows and 1 *Barbari* buck for goats was made available to the villagers. The services of these males are available for all villagers on a payment basis.

Improved breeds of livestock supplied to the village

Sr. No.	Particulars	Breed	No.
1	Bull	*Murrah*	01
2	Bull	*Sahiwal*	01
3	Buck	*Barbari*	01
4	Cock	*Cockrail*	03

Animal Health Camp

To educate the farmers about the importance of vaccination in livestock, the KVK organized 3 animal health camps.

Animal Health Camps	No. of Animal Vaccinated		
	2003	2004	2005
3	200	277	288

Seed production programme

The KVK at Majhgawan educated the farmers on seed production technologies. These farmers produced seeds under the close supervision and guidance of the scientists. The farmers reserved the seeds for the next sowing in a larger area. Surplus seeds were sold, and provided a good income to the growers. To educate the farmers about the importance of vaccination in livestock, the KVK organized 3 animal health camps.

Sr. No.	Crop	Seed Production (Q	Area covered under high yielding varieties in the village(acre)
1.	Gram	46	102.0
2.	Paddy	39	102
3.	Wheat	109	112.5
4.	Mustard	23	58.0
6.	Pigeon pea	14	35.0
7.	Spices	17.68	7.25
8.	Vegetable	3.80	11.00

1.5 & 2.5 acre farming system model

With a view to increased income from small holdings and to ensure a better standard of living, 1.5 and 2.5 acre models were successfully demonstrated on Shamser Singh Gond and Rajender Singh Gond's fields These farmers are now in a position to save Rs. 7,000.00 & 15,000.00 annually after meeting their family expenditure.

Self Help Groups (SHGs)

As migration of youth from the village was a major problem, Self Help Groups (SHGs) were formed for rural youth to encourage entrepreneurship and income generation. Micro financing of Rs. 25,000.00 was provided to 24 rural youth.

Sr. No	Particulars	No.
A.	Agricultural based	7
B.	Non-agricultural based	6
	Grand total:	**13**

Activities undertaken for employment generation in the village

Activities	No. of Programmes	No. of Beneficiaries
'Employment Opportunity Awareness' campaign in the village.	**1**	**59**
Motivational camps for unemployed rural youths.	**2**	**28**
Interactions between rural youth/experts.	**9**	**59**
Unemployed rural youth *sammelan* (Fairs).	**1**	**28**
Formation of (*Tarun Mandal*) Rural Youth Committees.	**1**	**10**
Formation of SHGs.	**13**	**65**
Value addition skill development programmes.	**3**	**15**
Value addition of farm and forest produce.	**13**	**83**
Training to improve the skills of traditional artisans.	**3**	**15**
Need-based income generation training programmes for unemployed rural youths.	**12**	**34**
Entrepreneurial development of villagers.	**2**	**7**
Micro-financing.	**24**	**24**
Low cost housing.	**2**	**2**

Activities being performed by SHGs

- Value addition of farm and forest produce
- Flour mill
- Vegetable cultivation
- Spice cultivation
- Forest produce collection
- Herbal collection
- Goat rearing
- Tyre puncture and cycle repairing
- *Visatkhana* and refreshment centre
- Tent House
- Diesel engine
- Thresher
- Traditional artisans (Blacksmith)

Besides motivating farmers to adopt improved production technologies and rural youth to start income generating enterprises at the village level, they were exposed to production techniques at the KVK and Udyamita Vidyapeeth.

Income generating SHGs in the village. Making Banana Chips (above), and tailoring (right)

Activities undertaken to improve the health and hygiene conditions in the village

Activities	No. of Programmes	No. of Beneficiaries
Awareness Programme for villagers about the ill-effects of unhealthy habits.	9	83 families
Health Awareness Campaign.	15	83 families
Treatment of common ailments and diseases through *Dadi Maa Ka Batua*	1	39
Organizing regular vaccination programmes for children and pregnant mothers	6	49
Motivational programmes for Family Planning.	7	34
Health and Dental camps.	5	184
Fruit tree plantations near houses, in wastelands and village community lands.	3	6089
Formation of *Gramin Vikas Samiti* (Village Development Committee).	1	15
Kitchen Gardens.	26	26
Motivational programme for families to start small savings.	83	83
Formation of *Tarunodaya Mandal* (Rural Youths Committee).	1	12
Healthy Child Competition Programme.	12	38
Garbhsth Shishu Sanskar (Pre-natal education) programme.	36	19
Women and childcare awareness programmes.	36	53
Motivational program for villagers for participation in keeping the village neat and clean.	17	83 families
Regular Vaccination programmes for children and pregnant mothers.	36	53
Educational programmes for villagers to keep a neat and clean atmosphere in the village.	3	83 families
Plantation of *Tulsi* and *Gudchi* plants in each and every house	3	83 families
Construction of soak pits and water drains	12	20
Plantation of avenue trees along village roads.	3	56
Wall writing & CD shows	6	83families
'Neat and clean' household competitions	6	83families
Construction of low cost toilets.		83 families
Village level programmes for health and hygiene issues at regular intervals in public areas.	15	83families
Cleaning of drinking water bodies at regular intervals.	9	83families

Activities undertaken to improve education, adult literacy and resolving disputes

Activities	No. of Programmes	No. of Beneficiaries
Separate classes for child labour.	1	15
Bal Sanskar Kendras (Children Education Centres).	1	25
Adult Literacy classes.	1	64
Motivational camps for children not going to school.	6	28
Cultural and sports competitions.	3	29
Close personal contact with families in dispute.	3	6
Regular meetings of villagers.	36	83families
Organizing *Sahbhoj* (Eating Together with Neighbours).	6	83families
Organizing social gatherings at the village level.	6	5670
Motivational programmes for villagers to collectively share each other's joy and sorrow.	45	83families
Campaign to make the village free of unhealthy habits.	3	83families
Village development funds.	1	Rs 35,000.00
Programmes for recognizing and celebrating the most exemplary person in the village.	6	24
Organizing community-based ceremonies to respect old people in the village.	6	38

An Adult Literacy Class being conducted in Patna Kala

The Bal Sanskar Kendra in Patna Kala

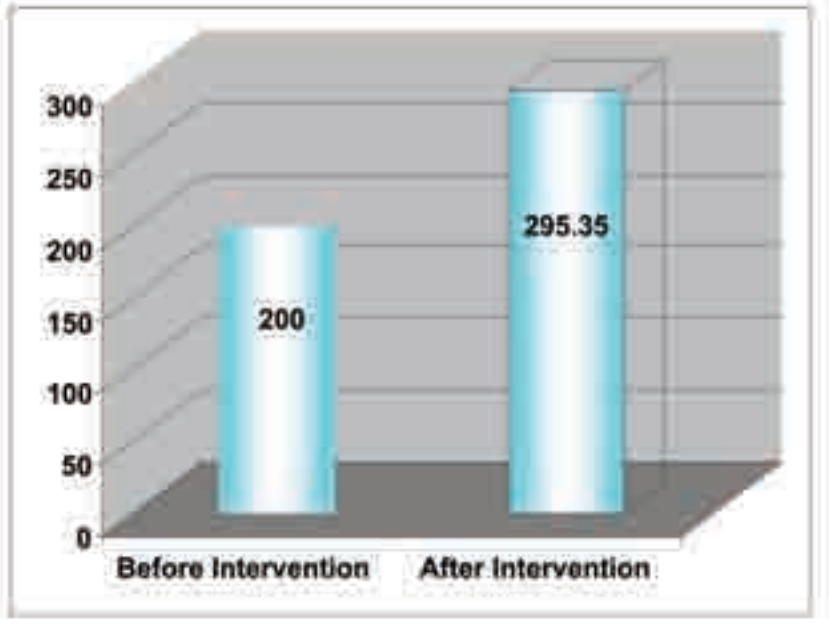
Output of Activities

The integrated approach adopted for the comprehensive development of the village has not only improved the socio-economic conditions of farm families, but changed the complete dynamic of the village. The villagers were cleaner, healthier, more aware of their rights and less inclined to be bullied by local toughs.

Prior to implementation agriculture was rain-fed, but with the implementation of watershed development activities, the groundwater level in the wells has shown a steady increase, and farmers who used to migrate to cities/towns have started farming.

Impact on Increase in Cultivable area (acre)

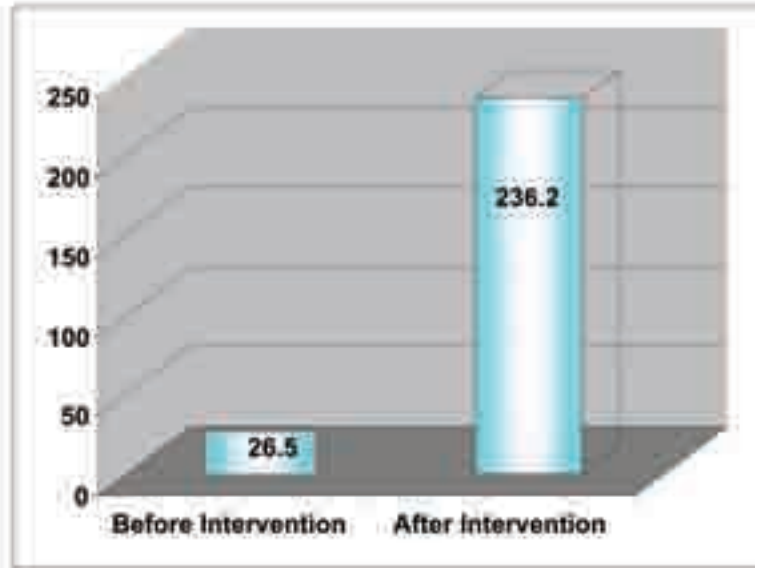
After the intervention of the KVK in the village, the area under cultivation has increased. Farmer not only brought fallow and 'culturable' wastelands under cultivation but also started taking 2 crop. This was mainly due to the introduction of short duration improved seed varieties and an increase in the irrigated area in the village**.**



Increase in Cultivable Area (acres)

Increase in irrigated area (acre)

Before intervention, only 26.50 acres (13.25 %) out of the total of 200 acre under cultivation was irrigated. The total irrigated area increased to 236.2 acre (79.99%).



Increase in Irrigated Area (acres)

Change in Cropping Pattern

The combined influence of on-field demonstrations in association with irrigation facilities and a change in the attitude of farmers towards the new production technologies, transformed the production scenario. By using improved and high yielding seed varieties the area under cash crops in the village increased significantly.

Crops	Before KVK intervention (2002)	After KVK intervention (2006)	Change (Acres)
Pigeon Pea + Sorghum	5.5	5.00	(-) 0.50
Paddy	82.0	130.50	48.50
Sesame	-	15.5	15.5
Black gram	-	9.8	9.8
Wheat	129.5	112.50	(-) 17.0
Barley + Chickpea	13.5	-	(-) 13.5
Pigeon Pea	-	22.00	22.00
Chickpea	31.0	104.25	73.25
Mustard	6.5	38.00	31.50
Vegetables	-	13.60	13.60

Chickpea emerging as a cash crop in the village

Increase in productivity

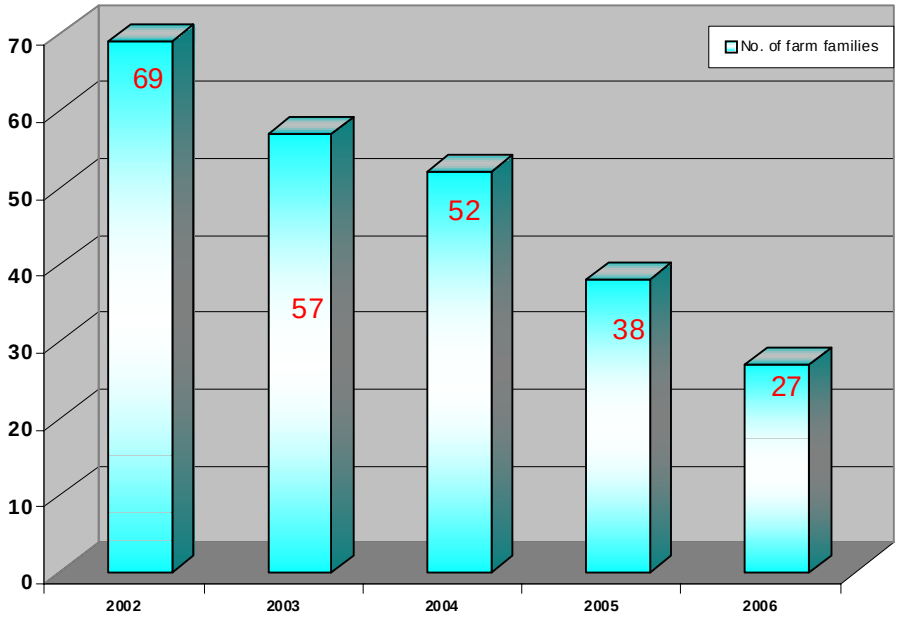
The implementation of various interventions to enhance agricultural productivity was very effective in altering the productive capacity of the land, as well as meeting the food requirements of farmers' families. A substantial increase in yield was recorded by discarding traditional farming practice. This increase in yield was due to intensive use of land and diversification of cropping pattern.

Increase in productivity (Quintal/acre) of various crops

Crops	Before KVK intervention (2002)	After KVK intervention (2006)	Increase
Pigeon Pea + Sorghum	2.0	3.98	1.98
Paddy	3.35	6.15	2.80
Wheat	4.20	8.45	4.25
Barley	2.96	-	-
Pigeon Pea	-	3.60	3.60
Chickpea	2.61	4.30	1.69
Mustard	1.46	2.95	1.49
Vegetables	-	65.50	65.50

Decrease in Mortagaged Farms

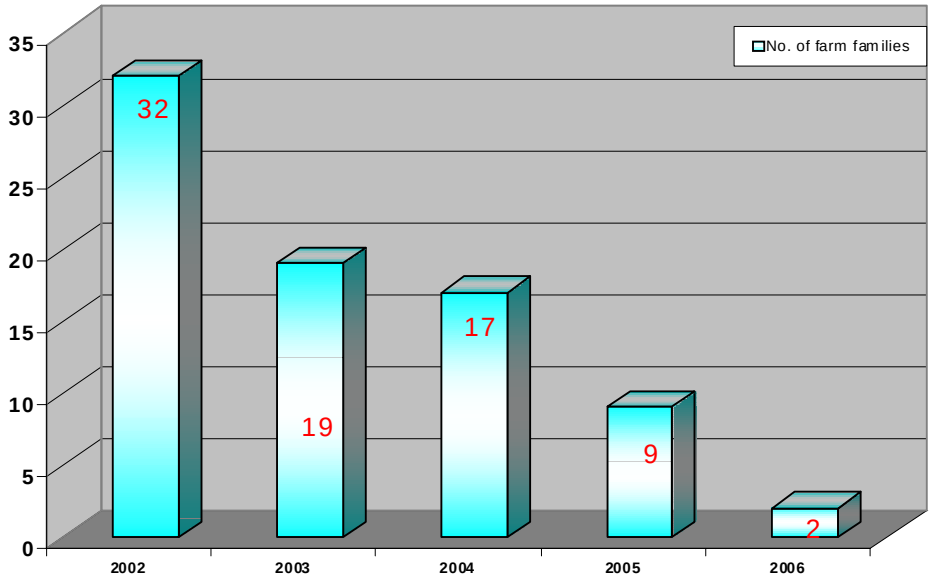
As the incomes of the farmers increased, 42 of the 69 farmers redeemed their farms from the local money lenders. The remaining 27 have partially cleared their loans.



Impact of activities on curtailing farm mortgages

Decrease in migration to towns/cities

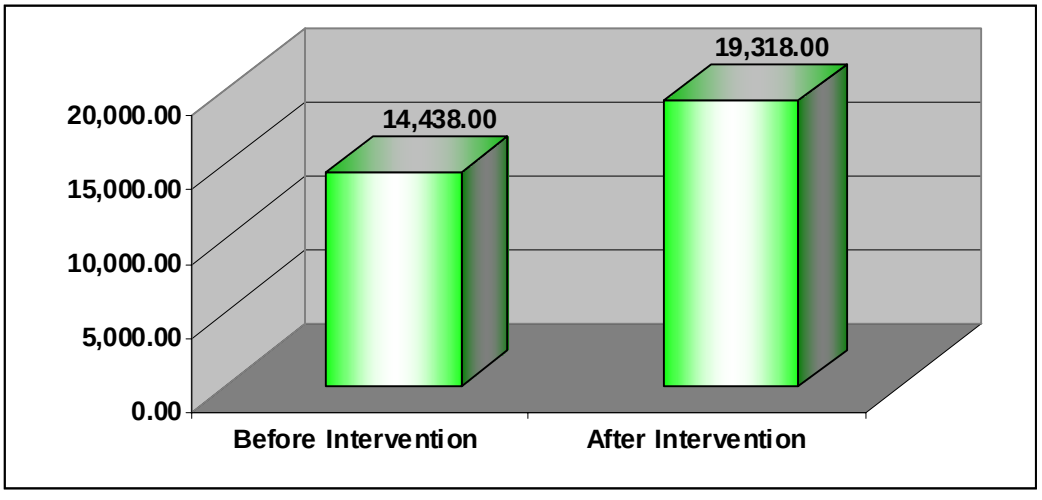
As incomes in the village, through both farming and value addition of farm and forest produce increased, villagers no longer needed to migrate to towns and cities for supplementary income.



Impact of activities on checking migration of farm families

Average increase in family incomes

The cumulative effect of various activities undertaken in the village for improving the socio-economic status of the villagers showed a marked influence on the income of farm families. The average family income has increased by 33.40% within a period of 4 years. This increase in income was mainly due to an increase in agriculture production.



Increase in family income

Change in Social Aspect

The activities undertaken for self-reliance in the village, not only improved the economic condition of the village but also brought basic change in the attitude of tribal families towards their education, health and self-confidence. The villagers have a sense of pride and are better geared for a fruitful and cooperative life. In the beginning of the campaign, 28 children in the village were not going to school. But with improvement in the lifestyle of the villagers, every family has started sending their children to school. Even most of the tribal families have started to send their children to Chitrakoot and Satna for better education. The villagers are living in harmony.

Sarve Bhavantu Sukhinah

PART IV
SOME INNOVATIONS OF THE SELF-RELIANCE CAMPAIGN

1.5 ACRE MODEL
AGRI-HORTI BASED FARMING SYSTEM MODEL FOR FOOD AND NUTRITIONAL SECURITY TO RESOURCE POOR FARMERS

Mission:

To convert uneconomic landholdings into economic holdings and make farm families self-reliant in food production

Purpose:

To ensure food and nutritional security to resource poor farmers

Objectives:

1. Ensuring food and nutritional security
2. Enhancing incomes
3. Employment Generation

Overview:

With the increasing pressure of population on agricultural land, it is now increasingly being felt at the international level, that for meeting the food requirements of the increasing population, more land will have to be brought under cultivation. But India is fortunate to have good potential for increasing productivity, as the productivity in our farming system is far behind its actual potential. The country will have to accord high priority to reducing the gap between realizable and actual yields in farmers' fields by identifying and removing the constraints responsible for the yield gaps.

After Independence, our agricultural policies were influenced greatly by the needs of big landlords. As a result, the needs of the large majority of small peasants were neglected. That is why even after 57 years of independence, three-quarters of our agricultural land remains uneconomical. Because of this lacuna in our agricultural policies, small farmers remain below the poverty line, and our country has not prospered agriculturally. More than 80% of Indian farmers own 2½ acres of land or less. Their share of cultivated land is about a third of the total available agricultural land in the country. Over time, due to high population growth that caused a division of land holdings, and a very slow growth rate of the rural economy, the pressure on land has been steadily increasing and the number of small and marginal farmers has been growing. These farmers can play a leading role in the development of the country by contributing to the nation's capital formation, if their uneconomic holdings are converted into economic ones. However, with the traditional cropping system, small and marginal farmers are finding it difficult to produce adequate food to feed their families. The only way to convert these holdings into profit-making ones is through the intensive use of land through diversification of crops.

Introduction:

In order to improve the economic and social status of these targeted groups of farming community, an effort was made by Deendayal Research Institute to develop some technologies for the benefit of marginal farm families. In this regard, a 2.5 and 1.5 acre horticulture-based farming system model were formulated and tested at the KVK farm, Satna, with the objective of providing sustainable food and nutritional security along with sufficient income. After the success of these models at the KVK farm, the models were replicated at farmers' fields for further validation and to help spread it to other neighbouring farmers. The 1.5 acre model, in reality, allows the beneficiaries to reap a saving of about Rs. 10-14,000/- in irrigated fields and Rs. 5-8,000/- in rain-fed holdings.

Success Story (Achievements):

The KVK at Satna has validated the model on 1.5 acre in Dewara village in Majhgawan Tehsil during 2005-06 and 2006-07. The results obtained on the 1.5 acre farm of Shri Ansuiya Kushwaha, as presented below, corroborate the concept of farm planning on a small landholding as per family requirement.

Sri Shri Ansuiya Kushwaha of village Dewara in Majhgawan Tehsil, with 6 family members, possesses 1.5 acre of land. A detailed survey of the farm family conducted in 2005 revealed that the farmer, despite having 1.5 acre of land and a well (perennial source of water), was not in a position to earn enough to feed his family well. The causes of low income were found to be under-utilization of available resources and traditional system of farming. The cropping pattern being adopted by the farmer was paddy-wheat.

Details of the farm, crop yield and income (before intervention)

Sr. No.	Year	Soil Type	Area (acre)		Crop	Yield (Kg)	Income (Rs.)
01	2004 - 2005	Sandy loam	Kharif	1.50	Paddy	1550	8680
			Rabi	1.50	Wheat	1630	11002.5
	Total					**3180**	**19682.5**

The farmer was getting a yield of 31.80 quintals with a gross income of Rs. 19,682.50, by investing Rs. 2,453.00 on the purchase of critical inputs (seeds, diesel, fertilizers and pesticides).

Whereas, the annual family expenses (food, clothes, education, house maintenance, social functions and miscellaneous) were calculated as Rs. 37,339.00, thus showing a deficit of Rs. 20,109.00 per annum.

Methodology:

With a view to converting an uneconomic landholding into an economic one, intensive cultivation on 1½ acres of land was undertaken with the active participation of the farm family during 2005-06 and 2006-07, in line with the concept of 1.5 acre landholding utilization. The requirements of food grains, pulses, oilseeds vegetables and fruits as computed for the 6 member family has been set out below.

Basic food requirement of a six member family (according to NIN, Hyderabad)

Sr. No.	Particulars	Per head per day requirement (gm.)	Food requirement/ Annum (kg)	Family requirement + 5% surplus for family guest
1	**Cereals**	**425**	**930.75**	**977.29**
	Rice	200	438	459.90
	Wheat flour	225	492.75	517.39
2	**Pulses**	**70**	**153.3**	**160.97**
3	**Oils**	**35**	**76.65**	**80.48**
4	**Vegetables**	**285**	**624.15**	**655.36**
	Leafy	100	219	229.95
	Tubers and roots	85	186.15	195.46
	Other vegetables	100	219	229.95
5	**Milk**	**214**	**468.66**	**492.09**
6	**Fruits**	**140**	**306.6**	**321.93**

Total requirement of family (food requirement of family + 5% surplus for family guests + Seed for the next year)

Sl. No.	Particulars	Family requirement + 5% surplus for family guest (Kg) *(a)*	Seed for next year sowing (Kg) *(b)*	Total requirement (Kg) *(c)*
1	**Cereals (Food grains)**	**1224.93**	**40**	**1264.93**
	Paddy (65% yield when converted to rice)	707.54	20	727.54
	Wheat	517.39	20	537.39
2	**Pulses**	**160.97**	**13**	**173.97**
	Black gram		1.5	
	Green gram		1.5	
	Gram		10	
3	**Oilseeds**	278.5	**8.5**	**287**
	Mustard (33% yield when converted to oil)	151.5	0.5	152
	Soyabean (24% yield when converted to oil)	127	8	135
4	**Vegetables**	**655.36**		**655.36**
	Leafy	229.95		229.95
	Tubers and roots	195.46		195.46
	Other vegetables	229.95		229.95
5	**Spices**	**149.48**		**149.48**
	Chillies	5.75		5.75
	Turmeric	5.75		5.75
	Ginger	11.50		11.50
	Garlic	5.75		5.75
	Onion	114.98		114.98
	Coriander	5.75		5.75
6	**Milk**	**492.09**		**492.09**
7	**Fruits**	**321.93**		**321.93**

In the 1.5 acre model, the cropping pattern being followed by the farmer was changed. The planning and layout of field was done on the basis of food requirements of the family. The area under each crop was allotted on the basis of average productivity of crop in the region. A crop calendar for the whole year was prepared to enable the farmer to perform various cultural operations at the right time, as shown in the following layout plan.

Layout and planning of field

Kharif

<table>
<tr><td colspan="7">Paddy (JR-353) – 0.5 acre</td></tr>
<tr><td rowspan="2">Soyabean (NRC-37) - 0.25 acre
Black gram (PU-30) - 0.25 acre</td><td>Brinjal (Kashi Taru) - 0.03 acre</td><td>Tomato (Kashi Amrit) - 0.1 acre</td><td>Okra (Kashi Vibhut) - 0.06 acre</td><td>Lobia(Kashi Unnati) - 0.03 acre</td><td>Spinach (All Green) - 0.03 acre</td><td>Radish (Pusa Chetki) - 0.03 acre</td></tr>
<tr><td colspan="2">Chilly (Kashi Anmol) – 0.1 acre</td><td>Cucurbits - 0.08 acre</td><td colspan="2">Turmeric (Shoruma) - 0.01 acre</td><td>Ginger (Nadia) - 0.05 acre</td></tr>
</table>

Rabi

<table>
<tr><td colspan="3">Mustard (NDR-8501) – 0.25 acre</td><td colspan="4">Gram (JG-315) - 0.25 acre</td></tr>
<tr><td rowspan="2">Wheat (WH-147) – 0.5 acre</td><td>Radish (Japanese White) - 0.05 acre</td><td>Pea - 0.05 acre</td><td>Tomato - 0.03 acre</td><td>Potato - 0.13 acre</td><td>Cauliflower (K-1) - 0.05 acre</td><td>Carrot (Pusa Keshar) - 0.01 acre</td></tr>
<tr><td>Coriander- 0.03 acre</td><td>Onion (ALR) - 0.05 acre</td><td>Garlic - 0.05 acre</td><td>Turmeric (Shoruma) - 0.01acre</td><td colspan="2">Ginger (Nadia) - 0.05 acre</td></tr>
</table>

Zaid

<table>
<tr><td colspan="3">Pulses - Moong – 0.25 acre</td><td colspan="4">Fallow - 0.25 acre</td></tr>
<tr><td rowspan="2">Fallow - 0.5 acre</td><td>Lobia (Pusa Komal) - 0.05acre</td><td>Tomato - 0.05 acre</td><td>Fallow - 0.03 acre</td><td>Cucurbits - 0.13 acre</td><td>Okra (VRO-6) - 0.05 acre</td><td>Fallow - 0.01acre</td></tr>
<tr><td>Radish – 0.05 acre</td><td>Spinach - 0.05 acre</td><td>Coriander - 0.05 acre</td><td>Fallow - 0.01 acre</td><td colspan="2">Fallow - 0.03 acre</td></tr>
</table>

Findings

The production obtained from crop-based enterprises on the respective allotted areas is given below. It is apparent from the production data the intensive cultivation model resulted in a substantial increase in yield and income over the traditional system of cropping. Shri Kushwaha harvested 13.22 and 13.35 quintals of food grains; 3.48 and 3.81 quintals of pulses; 3.19 and 3.14 quintals of oilseeds; 54.49 and 60.93 quintals of vegetables; 5.38 and 5.89 quintals of spices during the year 2005-06 and 2006-07 respectively, which is more than his annual requirement of food grains (12.65 quintal), pulses (1.74 quintal), oilseeds (2.87 quintal), vegetables (6.55 quintal) and spices (1.50 quintal). The production of year-round vegetables (47.94 and 54.37 quintal) was so much in excess of that required (6.55 quintal), that it gave Shri Kushwaha an opportunity for earning cash through the sale of the surplus vegetables. Spice production was to the tune of 3.88 and 4.39 quintal during the year 2005-06 and 2006-07 respectively, which again offered scope for earning cash.

Data showing crop yield and income from 1.5 acre land holding

Crops	Total Family require ment *(c)*	Production (Kg.)		Gross Income		Surplus production after meeting family requirement (c)		Value of the surplus produce (Rs.)	
		2005-06 *(d)*	2006-07 *(e)*	2005-06	2006-07	2005-06 *(d-c)*	2006-07 *(e-c)*	2005-06	2006-07
Cereals	**1264.9**	**1322.0**	**1335.0**	**9183.0**	**9475.5**	**57.1**	**70.1**	**418.7**	**1044.4**
Paddy	727.5	732.0	705.0	4758.0	4852.5	4.5	-22.5	24.1	349.8
Wheat	537.4	590.0	630.0	4425.0	4623.0	52.6	92.6	394.6	694.6
Pulses	**174.0**	**348.0**	**381.0**	**6972.0**	**8107.0**	**174.0**	**207.0**	**3457.2**	**4337.0**
Urad	58.0	68.0	**53.0**	1428.0	1219.0	10.0	-5.0	210.0	-115.0
Moong	58.0	51.0	47.0	1173.0	1034.0	-7.0	-11.0	-161.0	-242.0
Gram	58.0	140.0	164.0	2772.0	3444.0	82.0	106.0	1623.6	2226.0
Oilseeds	**287.0**	**319.0**	**314.0**	**4730.0**	**4739.0**	**32.0**	**27.0**	**489.4**	**400.5**
Soybean	152.0	165.0	168.0	2112.0	2184.0	13.0	16.0	166.4	208.0
Mustard	135.0	154.0	146.0	2618.0	2555.0	19.0	11.0	323.0	192.5
Vegetables	**655.4**	**5449.0**	**6092.0**	**29139.6**	**35282.9**	**4793.6**	**5436.6**	**25474.8**	**31188.1**
Leafy	230.0	569.0	657.0	3638.8	4892.2	339.1	427.1	2169.9	3181.5
Tubers & Roots	195.5	1642.0	1795.0	7948.4	9693.0	1446.5	1599.5	7001.3	8637.5
Others	230.0	3238.0	3640.0	17552.4	20697.7	3008.1	3410.1	16303.6	19369.1
Spices	**149.5**	**537.8**	**588.8**	**7906.6**	**8380.0**	**388.3**	**439.3**	**6661.2**	**7446.1**
Chillies	5.8	41.0	46.0	1558.0	1840.0	35.3	40.3	1339.5	1610.0
Turmeric	5.8	10.8	12.8	399.6	512.0	5.1	7.1	186.9	282.0
Ginger	11.5	187.0	209.0	2618.0	2508.0	175.5	197.5	2457.0	2370.0
Garlic	5.8	154.0	143.0	2556.4	2574.0	148.3	137.3	2461.0	2470.5
Onion	115.0	134.0	169.0	455.6	676.0	19.0	54.0	64.7	616.1
Coriander	5.8	11.0	9.0	319.0	270.0	5.3	3.3	152.3	97.5
Fruits	**321.9**	**163.0**	**358.0**	1589.3	3669.5	**-158.9**	**36.1**	**-1549.6**	**370.0**
Total	**2852.7**	**8138.8**	**9068.8**	**59520.5**	**69653.9**	**5286.1**	**6216.1**	**34951.7**	**44786.1**
Milk	**492.09**	**536**	**584**	**5896**	**7008**	**43.91**	**91.91**	**483.01**	**1102.9**
	3,344.8	**8,674.8**	**9,652.8**	**65,416.5**	**76,661.9**	**5,330.0**	**6,308.0**	**35,434.7**	**45,889.0**

*Prices of produce were calculated on the basis of prevailing rates in the local market.

The farmer obtained a gross income of Rs. 65,417.00 and Rs. 76,662.00 from the same holding by investing Rs. 7,640.00 and Rs 5,670.00 on purchase of critical inputs (seeds, diesel, fertilizers and pesticides). The comparative advantage made between before and after intervention, based on the commodity price structure prevailing during 2005-06 and 2006-07 reveals that Shri Kushwaha could have earned a net income of Rs. 17,230.00 from his 1.5 acre farm but he obtained Rs. 58,777.00 and Rs. 70,992.00 from the same holding by application of the 1.5 acre model farming system. An increase in net income by Rs. 41,547.00 and Rs. 53,762.00 respectively during the year 2005-06 and 2006-07 per annum from 1.5 acre is indeed substantial.

After excluding all the annual family expenses, a net saving of Rs. 18,095.00 and Rs. 29,049.00 was achieved during the year 2005-06 and 2006-07 respectively.

Further, it is praiseworthy to mention that the 1.5 acre model farming was visited by correspondent of *India Today* and was featured in the magazine. Shri Kushwaha received first prize each on 7 different occasions in 2006-07 in district level *Kisan Melas* for the enterprises he raised in 1.5 acre, which also indicates his conviction and devotion to use the small landholding in a profitable mode using the model.

The findings narrated above are from one out of 7 sites in different villages implemented by the KVK Satna on 1.5 acre. Similar findings have also been recorded from the other 6 sites.

Annual family expenses & net saving

Sr. No.	Particulars	2005-06	2006-07
1	Foods	29,982.00	30773.00
2	Clothes & Education	3,700.00	3,900.00
3	Social functions	1,850.00	2,540.00
4	House Maintenance	1,000.00	1,000.00
5	Medical Treatment	2,300.00	1,240.00
6	Miscellaneous	1,850.00	2,500.00
	Total Expenditures	**40,682.00**	**41,953.00**
	Net Income	**58,777.00**	**70,992.00**
	Net Saving	**18,095.00**	**29,039.00**

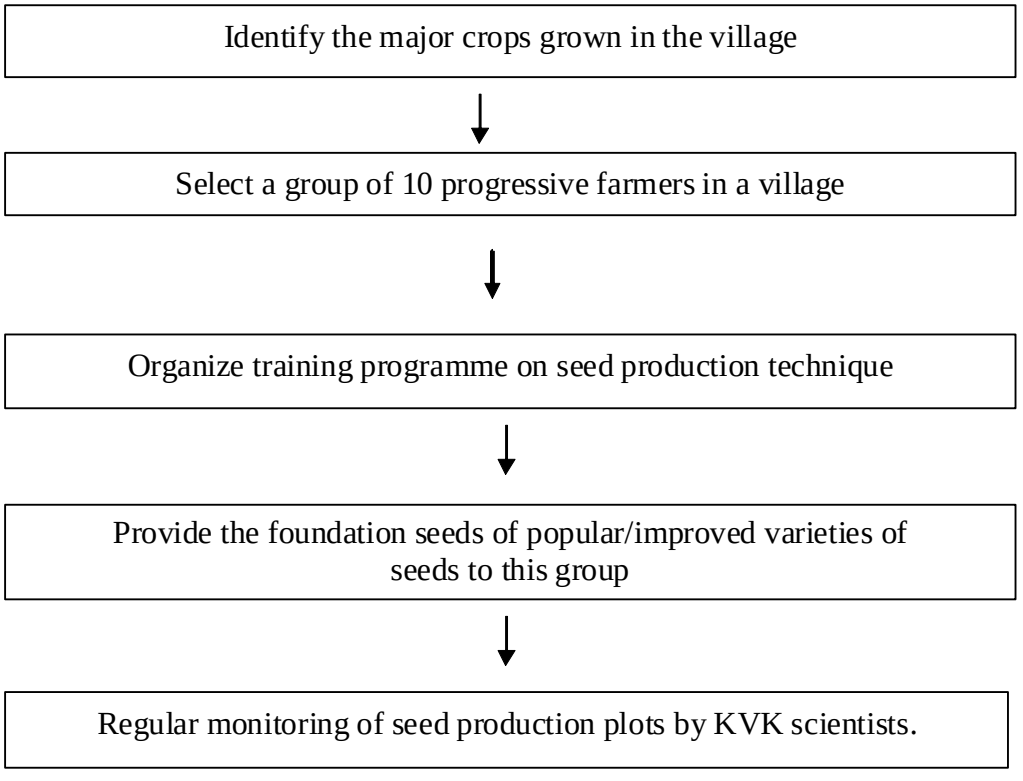
Conclusion:

From the above results it can be concluded that crop diversification by incorporating pulses, oilseeds, vegetables and other cash crops in a scientific cropping pattern can play an important role in increasing farm incomes and employment to achieve nutritional security. Further, as the average family landholdings at the national level have come down, interventions are further needed to convert such uneconomic landholdings into profitable one. Such studies can make a difference to the livelihood as well as food and nutritional security to the people. As such, the focus of extension functionaries should shift to farming system diversification.

Seed Village/ Seed Club:

Small and marginal farmers face a major problem in crop yield due to their inability to purchase good quality seeds. Increased costs of seed, poor germination, limited availability of seed and its transport are some of the constraints that are usually faced by the farmers. Most farmers still use seed that was introduced into their farms decades ago. During a baseline survey of some of the villages, farmers repeatedly expressed their desire that the KVK/State Agriculture Department ensure availability of seeds of improved varieties to farmers on a barter basis. However, KVK with limited land resources, as such, cannot produce enough seeds of improved varieties to meet the ever-increasing demand of the farmers. So, to meet the demand of seeds and to make the villages self reliant in seed requirement, KVK, Majhgawan introduced seed production programmes through selected villages. For this, a seed village in a cluster of villages, and seed clubs at the village level were developed. KVK demonstrated the seed production technology at its instructional farm. Seed villages/seed clubs are producing seeds under close supervision and guidance of KVK scientists. The seeds produced in these villages are vigorous and healthy. The farmers are converting more and more of their crops into high yield varieties. These villages are now not only meeting the seeds requirements of their own village, but also supplying the surplus seeds to nearby villages that provide good income to the growers. The members of the Seed Clubs exchange their seeds for food grains within the village (for 1 kg seed they take 1.25 kg food grain from farmers).

Formation of seed club:



The latest high-yield Wheat variety MP1142 being grown in the KVK Maghgawan prior to its propogation in Seed Villages & Seed Clubs

Livestock up-gradation

In the 512 villages covered in the self-reliance campaign, there is a large population of livestock. On an average each farm family possesses 6-7 animals. However, the productivity of the animals is very low, due to either poor genetic potential or poor feeding management. Therefore, to improve the productivity of livestock in the region, the *Krishi Vigyan Kendras* undertook a livestock up-gradation programme. A survey of the operational area revealed that there were no high milk yield breeds of cow/buffalo/goat in the entire region within a radius of about 50 km. To upgrade the existing low productivity animals in the region, KVK initiated the following up-gradation programmes, choosing breeds suitable to the local conditions, namely,

- Natural breeding in buffalo – *Murrah*
- Artificial Insemination in Cattle – *Sahiwal* and *Haryana*
- Natural breeding in goats – *Barbari* and *Jamunapari*

Improvement of genetic potential in non-descript buffaloes through natural breeding

Eight buffalo bulls of the 'Murrah' breed from Narendra Dev University of Agriculture & Technology, Kumargang, Faizabad during the year 2003, and five buffalo bulls from the Central Institute for Research on Buffalo, Hisar during the year 2005 were procured for up-gradation of local non-descript buffaloes. One *Murrah* bull was kept in a cluster of five villages after castrating the local bull calves. The details of services and calving are given in the table below.

Data showing the progress of natural breeding in buffaloes through high milk yield bull – *Murrah* in the South region

Village Name	No. of services	No. of births	No. of services	No. of births	No. of services	No. of births	No. of services	No. of births
	2005-06		2006-07		2007-08		2008-09	
Barua	54	48	168	131	144	114	155	141
Bhargawan	76	73	105	95	176	135	176	159
Devlaha	21	17	76	60	84	59	162	148
Patna	62	56	62	50	86	70	42	34
Kelhora	86	82	92	76	105	76	154	143
Malgausa	42	38	146	131	109	95	144	129
Khodari	146	142	142	104	136	108	63	47
KVK, Majhgawan	86	83	85	62	89	63	38	32
Total	**573**	**539**	**876**	**709**	**929**	**720**	**934**	**833**

Data showing the progress of natural breeding in buffaloes through high milk yield bull – *Murrah* in the North region

Village Name	No. of services	No. of births	No. of services	No. of births	No. of services	No. of births	No. of services	No. of births
	2006-07		2007-08		2008-09		2009-10	
Mirjapur	193	135	298	238	268	201	308	232
Baihar	110	71	195	137	180	126	235	167
Babupur	60	42	110	77	110	79	65	42
Dhan	20	10	40	25	-	-	-	-
KVK, Ganivan	2	2	69	55	111	100	141	119
Total	**385**	**260**	**712**	**532**	**669**	**506**	**749**	**560**

Improvement of genetic potential in non-descript cows through natural breeding

46 bulls of high milk yield potential of *Sahiwal* and *Haryana* breeds were provided to the villagers of the Self-Reliance centres, after testing the performance of the breed by DRI's Govansh Vikash Evam Anusadhan Kendra, Chitrakoot. To popularise this programme, Veterinary Health Camps were organised in the operational area. Local low productive bulls were castrated, and the farmers taught the benefits of the up-gradation programme for their animals. Under this programme, one bull covers the cows of 2-3 villages. Since its inception, 9,824 upgraded calves were delivered.

Artificial Insemination (AI) in Cows:

KVK Majhagawan, started an Artificial Insemination (AI) programme for Cattle in 2004 with financial assistance from the District Rural Development Agency with Deep Frozen Semen of the *Sahiwal* and *Haryana* breeds. The KVK trained rural youth as para-veterinarians for this purpose. Three centres in Majhgwan Tehsil (Hiroundi, Chauraha and Birsinghpur) were established for providing AI facilities in the villages. To popularize the AI technique in the area, 42 veterinary health camps were organized at the *panchayat* level. The farmers were educated on the importance of AI through these camps. To make AI effective, all the local bulls were castrated. After conducting AI, the cattle were examined, and if the AI had failed, the process was repeated. Details of achievements with Artificial Insemination are given below.

Yearwise details of Artificial Insemination

Year	2004-05	2005-06	2006-07	2007-08	Total
AI	119	266	358	1258	2001
Pregnancies diagnosed	110	247	296	1094	1747
Confirmed Pregnancies	74	128	202	602	1006
Successful calving / upgraded calves	66	114	193	579	992

Genetic improvement in Goats:

Goat rearing can be an important enterprise for improving the socio-economic condition of resource-poor families, particularly landless farm families. But productivity of the existing local breeds is very poor. KVK felt the need for upgrading the genetic potential of these local non-descript goats. KVK procured two improved breeds of goats – *Barbari* and *Jamuna Pari* from the Central Institute for Research on Goats, Mathura in 2003. In subsequent years, KVK provided the 42 bucks of *Barbari* and *Jamuna Pari* to the farmers of the selected villages under the self-reliance campaign for up-gradation and 22 pure goats. Now, 4 small pure breed herds and more than 3,500 upgraded kids can be seen in the region.

CONCEPT NOTE
VERTICALLY INTEGRATED INCOME GENERATION SHGs

For the success of any effort to improve the economic condition of BPL families, Non Farm Sector income generation, *without causing a migration from the villages*, is a key factor. The problem with this is two-fold. First, there is a lack of opportunity and second, there is a lack of organisation.

To overcome the lack of opportunity, Deendayal Research Institute (DRI) has envisaged a multi-level production flow, using Udyamita Vidyapeeth as its focal point that would bring some of the value addition processes into the village itself. The products would be those that use farm or forest produce as the base raw material.

To overcome the second problem, namely the lack of organization, DRI has adapted the brilliant but under-utilised Governmental concept of Self Help Groups. Self Help Groups are today mainly an alternate banking system, with income generation a secondary activity, of a socio-economic grouping of 20-25 persons, usually on a gender basis, where members are encouraged to save a part of their earnings and where the savings form a corpus fund from which any member in financial trouble can draw an advance or loan. Peer pressure from within the group ensures an almost non-existent default rate. This model assumes that the group already has some employment, and the group's skills are sometimes enhanced through training and better facilities.

DRI's SHGs are a grouping of 5-7 persons formed to perform a specific economic task/job function, regardless of skill or gender, and based solely on a *desire* to perform the task. Training is imparted to the group, either through a government scheme, when available, or through DRI's resources when not available. The training stipend is pooled together to give the group seed money for any implements or tools required for the task. The idea behind a small SHG is that 5-7 persons can establish a bond among themselves. Friendship and camaraderie are key factors in teaching villagers to work together.

In the current production process, farm and forest produce are merely collected at the village level, from where they are sold either to a middleman or at the nearest *mandi*. Any processing or value addition is then done outside of the village. This results in only a fraction of the realizable value of the produce remaining in the village.

DRI's multi-level employment scheme focuses on keeping the maximum realizable value of the produce in the village itself. It achieves this through a two-pronged strategy. Each stage of the process from raw material to finished product is carefully defined – from collection, through the various intermediary stages until quality control to packaging. As many of the stages as possible would be retained in the village itself. The semi-processed produce will then be taken to Udyamita Vidyapeeth for grading, quality control, final processing, packaging and dispatch. Each stage of the process would be completed by a SHG. In a normal production flow, SHGs at the lower end of the production process, like collection, have a far lower economic value than those involved at the higher end of the process. DRI envisages an equal distribution of income across the production process. For example, if there are 7 stages to a particular production flow, Udyamita Vidyapeeth will determine a basic payment for each SHG - assume Rs. 2/- per kg. for each production stage, making a total of Rs. 14/-. If the selling price for the produce is Rs. 25/, Udyamita Vidyapeeth will deduct its infrastructural costs of say Rs. 4/-, and the supernormal profit of Rs. 7 will be divided equally among all the 7 SHGs involved in the process, so that each SHG will receive Rs. 3/- instead of Rs. 2/-.

Also, wherever possible, traditional artisan skills will be gathered and improved upon with training to implement a scheme of 'one village, one product' to produce a range of finished goods that would be packaged and marketed through Udyamita Vidyapeeth. The village would also be divided into SHGs.

MICRO FINANCE

After training rural youth at Udyamita Vidyapeeth, Deendayal Research Institute's Rural Entrepreneur Training Centre at Chitrakoot, it was founf that individuals were still unable to set up need-based industries (with the exception of raw material based industries). This was because of a lack of funding.

To overcome this problem, Udyamita Vidyapeeth, drew out project proposals for the rural youth to allow them access bank loans. However, none of the youth wanted to apply for the loans. They listed various difficulties, including the payment of interest, as the reason for their reluctance.

Udyamita Vidyapeeth realized that the funding requirements of a majority of the applicants were too minor for them to deal with the banks. From donations received by the Institute, Udyamita Vidyapeeth opened a bank account under the name '*Swavalamban*", to advance interest free micro loans to those in need.

The methodology to ensure repayment and zero default was as follows:

1. Meeting in the village, attended by the villagers and *Samaj Shilpi Dampati* of a particular cluster, where the villagers themselves recommend the case of the candidate.
2. Where possible, the candidate contributes up to 50% of the capital requirement – his/her ability to raise capital is verified by the villagers themselves.
3. At the end of the meeting, a list of successful applicants are given a date to come to Udyamita Vidyapeeth to collect their cheques and complete other formalities.
4. During their visit to Udyamita Vidyapeeth, the candidates are welcomed, shown around the campus, fed lunch, told where the funds have come from and also introduced to any senior DRI functionaries who are available. This is to give them a sense of belonging and togetherness, as opposed to the fear that they inherently have for funding institutions.
5. The candidates are photographed and sign a mortgage agreement on Rs. 10/- stamp paper that would be in force until the repayment of the total loan amount. The cheque is then handed over.
6. The *Samaj Shilpi Dampati* ensure that the shop/enterprise is started within 2 working days from the date of receipt of the cheque, and on the 3rd day, staff from Udyamita Vidyapeeth check that the loan has been properly utilized at the village itself.

Since its inception in May 2004, a total of Rs. 6,00,782.00 has been distributed to 207 beneficiaries. The loan recovery rate in clusters where *Samaj Shipli Dampati* operates has been 100%. The loans have been made available to all – whether educated or uneducated; young or old; man or woman; farmer or landless worker. The sole criterion was need.

The main impact of Udyamita Vidyapeeth enabling unemployed rural youth through micro finance has been to check migration to urban centres, and increase demand for training of employment-generating skills.

Dadi Ma Ka Batua
(Medicine at the doorstep)

Traditionally, grandmothers in the family used to keep a medicinal pouch that used to contain various locally available medicines. She used them to cure many minor health disorders. They were treatments that evolved through experience. Arogyadham has prepared a medical kit of a similar type. 33 herbal medicines prepared in its *Rasashala* are used in this kit. All common minor ailments can be treated with these medicines. All these medicines are prepared using locally available herbs, and are very cheap. This medicinal kit has become very popular among the people of these villages. The directions for the use of these medicines, in very simple language, is given along with the kit. Once this kit is in your hand, you do not need to go anywhere for the treatment of simple, common ailments. The poorest of the poor can also be self-sufficient. Socially aware persons in the villages have also been trained in the use of these medicines. They treat the patients in their village. Chronic and serious patients are sent to Arogyadham at Chitrakoot for further treatment.

Dadi Ma Ka Batua contains following the medicines:

Sl. No	Name of Medicines	Uses	Dose	Instruction
TABLETS				
1	Chitrakadi Vati	Loss of Appetite, Chronic Amoebiasis	1-2 Pill	Chew 3 times a day
2	Sanjeevani Vati	Fever, Common cold	1-2 Pill	With hot water 3 times a day
3	Soolhar Vati	Body ache, Joint pain	1-2 Pill	With hot water 3 times a day
4	Laghu Shootshekhar Vati	Hyperacidity, Fever	1-2 Pill	With water 3 times a day
5	Triphla Vati	Oedema, Blunt Injury, pain	1-2 Pill	With hot water 3 times a day
6	Lavangadi Vati	Cough	1-2 Pill	Chew 3-4 times a day
7	Kutaj Vati	Dysentery, Diarrhea	1-2 Pill	With hot water 3 times a day
POWDERS				
8	Sankhpushpi Churna	Mental tonic	3-5 gm.	With hot water 2 times a day
9	Shakti Churna	General tonic	2-5 gm.	With milk 3 times a day
10	Kaph Nashak Churna	Cough	3-5 gm.	With hot water 3 times a day
11	Pachan Churna	Loss of Appetite, Colic pain, Gastric Disorder, Chronic, Amoebiasis	2-5 gm.	With hot water 3 times a day
12	Triphla Churna	Constipation, Gastric Disorder	1-5 gm.	With hot water before sleeping
13	Bal Rog nashak Churna	In all Pediatric Diseases	125 gm.	With Honey 2 times a day
14	Jwar Nashak Churna	Fever, Body ache	3-5 gm.	With hot water 2 times a day
15	Dhat Nashak Churna	Leucorrhoea	3-6 gm.	With rise water (*Maand*) 3 times a day
16	Mutra Roghar Churna	Kidney and Urinary Disorder	3-5 gm.	With water 3 times a day
17	Swashanti Churna	Bronchial Asthma	3-5 gm.	With hot water 3 times a day
18	Krimi Nashak Churna	Worms Infection	1-2 Teaspoon	With hot water at a night
OILS				
19	Shoolhar Tail	Muscular pain, Joint pain	For local application	To be massaged gently over the affected area
20	Charm Rog Nashak Tail	Skin Disease	For local application	To be applied gently in the skin over the affected area
21	Bilwa Tail	Ear Disease (Otitis Media)	2-3 Drops	2 times a day
22	Irmidadi Tail	For toothache & Gingivitis	2-3 Drops	2 times a day
OTHERS				
23	Netra Bindu	Conjunctivitis. Eye disease	2-3 Drops	2 times a day
24	Mayurpichha Masi	Nausea, Vomiting	125 mg.	With honey 2 times a day
25	Sarjaras Malham	Skin burns	For local application	To be applied gently in affected area
26	Sudhha Tankan	Stomatitis	125 mg./for local application with honey	To be applied inside the mouth
KWATH CHURNA				
27	Kantakari Kwath Churna	Cough, Bronchitis	10 gm	Mix 10 gm of Kwath Churna with a glass of water and boil till ¼ is left. Filter and drink twice a day.
28	Vasa Kwath Churna	Dry Cough, Asthma	10 gm	" "
29	Chirayata Kwath Churna	Fever, Pain, Body ache	10 gm	" "
30	Guduchi Kwath Churna	Fever, Gout, Pain	10 gm	" "
31	Triphla Kwath Churna	Constipation, Fever	10 gm	" "
32	Dashmool Kwath Churna	Pain, Fever, Common cold	10 gm	" "
33	Gokshur Kwath Churna	Kidney and Urinary Disorder	10 gm	" "

Reverence for Elders

The joint-family was an integral part in Indian culture and was prevalent in Indian society since ancient times. Parents and grandparents lived together and shared their views, knowledge and experiences with their children and grandchildren. Through this interaction, younger generations automatically learned moral and social values. Joint-families are no longer common. Western ideas and the single family concept has become the norm, particularly in urban areas. Grandparents and family elders are no longer held in the esteem that they once were. This is the main cause of declining moral standards in society today.

To counter the negative aspects of the single or nuclear family concept, Deendayal Research Institute conducted special programmes called *Shardha Parv* (Reverence for Elders) in the 500 villages with the help of

Samaj Shilpi Dampatis. The *Shardha Parv* festivals are held 2-3 times in a year in every village. As part of the festival, family members give proper regards and rewards to village elders and grandparents. The activities performed in this programme are: Villagers gather in a common place and invite the elders of the society join the programme. In the function, family members wash their elders feet, put *tilaks* on their forehead, garland them with flowers, touch their feet, feed them *prasad* and give them new clothes. The elders bless family members, offering prayers for their happiness and prosperity. The impact of this programme is noticeable. The elders are happy, and the younger generation has started to benefit from their knowledge and experiences for the betterment of their family and society.

DEENDAYAL RESEARCH INSTITUTE
Chitrakoot,
District Satna,
Madhya Pradesh,
India.
Tel. (07670) 265358, Fax. (07670) 265510
info@chitrakoot.org