Towards Holistic Rural Health-

The beginning:

Mahatma Gandhi started a 15 bedded hospital in 1945 in Sevagram, Wardha district, Central India. He did this in memory of Smt. Kasturba Gandhi, his wife and partner in the freedom movement, who died in detention at the Aga Khan Palace, Pune, Maharashtra, India.

After the Mahatma's death in 1948, Ms.Manimala Chowdhary and Dr. Ranade managed this hospital, under the banner of the organization, *Gandhi Smarak Nidhi*. They found the expenditure of the hospital high and wanted to hand it over to the Government. The hospital workers did not like the idea and consulted the leaders of the village communities whom they had been serving. The villagers came forward and offered to make contributions for the upkeep of the hospital. Smt. Manimala Choudhary and Dr. Ranade went around in their bullock carts collecting *Jowar* (Sorghum) at the harvest time. Every one gave as much as he liked or could afford.

This marked the birth of the concept of "Health Insurance".

In 1964, the Kasturba Health Society (KHS) was formed, which took over the reins of running the hospital. By then, the hospital had a 50 bed capacity. A corpus of Rupees ten lakhs was transferred to KHS, to run the hospital on the interest of Rupees one lakh earned on the corpus.

KHS insured entire villages. Insurance was done by the *village Panchayat*/villagers themselves at Re 1/head/annum. If 75% of villagers from a village participated, that village was considered insured.

In 1969,KHS became a teaching hospital with 500 beds and the medical college was named Mahatma Gandhi Institute of Medical Sciences (MGIMS).

Professor Ulhas Narayan Jajoo

Lineage:

Grandfather: Shrikrishnadasji Jajoo:

Shrikrishnadasji Jajoo left his roaring law practice and spent his entire life with the Gandhian movement, organizing constructive programmes related to Khadi and village industries.

He declined the post of Chief Minister of erstwhile Central Province- the current state of Madhya Pradesh in India and the post of the first Finance Minister of independent India, offered by Mahatma Gandhi and Sardar Vallabh Bhai Patel.

Thus let me live unseen, unknown,
Thus unlamented let me die,
Steal from the world and not a stone
Tell where I lie.

Words Worth

Father: Shri Narayan Jajoo:

Teacher by profession and Samaritan for social causes, he instituted the annual Shrikrishnadasji Jajoo oration to appreciate, acknowledge and felicitate the people who devoted their life for the upliftment of the downtrodden in the society. Even now, he participates in the management of various social institutions in Wardha town and is regarded as a "practical ideologist"

Professor Ulhas Jajoo: Born in 1951.

The journey towards holistic rural health began in 1977 when he joined MGIMS as a lecturer in the department of Medicine, after completing his post-graduation in Internal Medicine from the Government Medical College, Nagpur, Central India.

He embarked on this journey, punctuated with the pearls of experimental research and experiential learning, similar to the "Experiments with Truth" encountered by his idol, Mahatma Gandhi.

Marriage: 1979, with Sow. Kiran Bhutada, teacher by profession and a great soul mate and ideal foil in his philanthropic commitments. She has always been a source of inspiration and positive inputs.

Being nurtured in the Gandhian way of life, he founded the Medico Friend Circle (MFC) with a socially committed group comprising of people from the medical and other fraternity, with similar bend of mind. MFC evolved a thought current that enlarged one's role in the society.

As he was finishing his medical school, the young Prof. Jajoo understood that health needed to be amalgamated with the socio-economic upheaval of the villagers. In short, the vision of *Gram Swaraj*, economic freedom for the villages, has been cherished dream. The realization of this goal had to be by awakening people about self-reliance through the various village-centric programmes.

The execution occurred in various stages, mainly by providential learning as a result of introspection and experience.

***Philosophy*:**

-To motivate and work with the local community and developmental agencies, to plan, implement and monitor programmes at the grass root level. With basic respect for the local wisdom, he redesigned home grown systems instead of transplanting ideas from elsewhere. Experiment, innovate and improvise, have been the mantra all along.

-To create an environment of participatory democracy centered on self- governance and develop a non-profit, non-political and non-religious framework for the same.

The phrase "A candle doesn't lose anything by lighting another candle….." underlines his philosophy.

***Spectrum of work*:**

It has been a journey, which can be classified into various phases, each phase being about executing the necessary remedial measures by understanding the problems of the people, as and when they crop up.

This process of understanding would lead to soul searching and emergence of innovative and practical experiments on the remedy, before arriving at the logical and practical solutions. It has been a seamless journey, with the process of learning, imbibing and executing being a continuous one.

For better understanding of the various landmark achievements and breakthroughs, we could classify them on the basis of time.

Phase 1-1978-1984:

Early days:

The phase of reaching the villages and interviewing the people to understand their life and their problems much like the old Chinese proverb:

Go to the people,
Live among them,
Love them,
Serve them,
Learn from them and
Start with what they have and
Build upon what they have.

He raised a group of enthusiastic medical students and friends christened as Medico Friends Circle, Sevagram, who walked /cycled to villages and understood the villagers' views and the priority given to health.

Entry point:

Getting a bank loan to the villagers helped in breaking the much needed ice with them and winning the confidence of the people. Farm loan facilitation from banks was done for eight villagers and then, gradually other issues like electric supply, water pumps, procurement of cross breed cows and local disputes were taken up and resolved. This proved the real masterstroke that underlined the beginning of the process of endearment with the villagers.

In the course of their discussion with the villagers, it was learnt that:

Health was low in the priority list, the last and least after food, employment and education.

Health for villagers meant coming to the hospital to seek medical help only when they could not carry on their work, as they could not afford to lose their daily wages.

The rude awakening was when a patient from the village, Pujaai,15kms from the Kasturba Health Society hospital, could not access the tertiary care facilities due to lack of travel logistics and infrastructure. The unfortunate death highlighted that few things were in place as far as the healthcare delivery process was concerned.

The baby steps:

Creation of a village fund:

Collected in kind in the form of *Jowar* (Sorghum), during December, the harvest time, as per each one's capacity, judged by the land holding. This way, the wealthier members of the community cross-subsidized for the poor landless labourers among them. Seeds for social justice, more than insurance, were being sown.

The proceeds from sale of *Jowar* were used to create a fund. This fund was utilized for:

-Honorarium to be paid to Auxiliary Nurse Midwife (ANM) and Village Health Worker (VHW).

-Commonly used medicines to be kept with the VHW.

-Transportation charges for visiting the mobile van carrying Auxiliary Nurse Midwife (ANM) and a social assistant visiting the village once a month.

The plan was to hospitalize those in need of tertiary medical care and treat them for free.

The concept of creating a healthy nexus between primary care and hospital care was being put in place.

***Conscious decision*:**

Nobody would receive free dole, as freebies only make people dependent. It was decided to seek voluntary participation from villagers in any action planned.

***Village chosen*:**

Nagapur, situated 6 kms from MGIMS and Kasturba hospital, starting with a weekly out-patient clinic.

The village provided:

-The premise for the out-patient visit and examination.

-Money for the Drug bank, for essential medicines and honorarium for the village health worker at rupees four/family.

The plan was to visit the village once a week on a bicycle, conduct village dispensary and link it to the Kasturba Hospital, for referrals and hospitalization.

***Teething problems faced*:**

-The VHW chosen was age barred as per the government criterion and hence could not be adopted in the government system.

-The Drug bank went bankrupt.

-The village *Dai*, who by experience used to conduct deliveries at home, could not be enrolled in the government training scheme.

The poor response to out-patient services, VHW services, vaccination programme and the complete lack of hygiene awareness, made this endeavor a non-starter.

Introspection on the reasons for the same, revealed:

-Unaffordability of medical care,

-Health is not a priority at all, making the two ends meet always remains the main priority.

The counters to overcome the problems:

-To appoint

Village Health Worker-VHW

Had to be a social minded person, with good moral character, from the village, selected by a democratic process. He would act as the link between the villagers and the doctors. The incentive for the VHW was not the money or material benefit but the prestige, power and creativity that they would enjoy in the process of voluntary participation. The remuneration would be fixed at 35% of the village fund, with 20% being given upfront and 15% given at the end of the year with the consent of the *Gram Sabha*, the village council to ensure that the VHW is accountable to the villagers. Though the remuneration barely met the VHW's travelling expenses, It ensured that they do not spend from out of their pocket. The voluntarism had to be kept alive.

Traditional Birth Assistant (TBA)/Dai-

The *Dai* is an absolutely crucial peripheral link of the outreach maternal service, if efficiently backed up by tertiary care services.

Being a resident of the village, she is more committed to the well-being of the villagers. In contrast, an Auxiliary Nurse Midwife (ANM) appointed by the Government for the pre and post natal care of the mothers, for a cluster of 5 villages may not be as dedicated.

Though the above guidelines for selection of the VHW and the *Dai* were laid down by the bitter experiences of trial and error, the requisite response in the form of utilization of these services was lacking. The VHW and *Dai*, despite their muted acceptance, did serve as vital cogs in the wheel of healthcare delivery to the poor villagers.

Thus, most of villages had two health workers, one male and one female, assisting each other for the comprehensive healthcare development of the village, ably backed up by medical team at the Kasturba hospital.

Guidelines formulated for the insured:

-Acute emergencies- treatment was free of cost.

-Elective conditions, like pregnancy and chronic ailments like cataract, hernia-co-payment to the tune of 25% of the total cost of treatment and hospitalization.

-Optimal use the services of the Village Health Worker (VHW) and *Dai*:

Dai, being a resident of the village, would detect pregnancy early and initiate monthly supplementation of folic acid, iron and calcium to them. They would also see that pregnant women visited the hospital at 7^{th} month of pregnancy. This antenatal check-up included assessment of the birth passage (pelvis), risk factors like blood pressure and urine albumin, receiving the booster dose of Tetanus Toxoid and awareness of the available post-partum services.

Along the path of healthcare delivery, the philosophy was to tackle the problems of health of children and sanitation. Interestingly, the education of the villagers on these aspects, turned out to be a two way process, with the doctors realizing the practical reasons behind the perceived deviations from best practices by the villagers.

With better acceptance of the health care delivery and health assurance, thoughts on the next logical need based step of increasing awareness regarding hygiene, viz. one toilet/house and income generation avenues like dairy development and lift irrigation to ensure utilization of stored water for cultivation, horticulture and sericulture, took shape.

Some burning issues:

The process of learning

-On the issue of controlling the size of the family, for achieving better nutrition, the doctors came across the following arguments-

The more the children, the more the helping hands in the farm, resulting in economical labour and increase in farm productivity and better output from agriculture.

The need for the male child, preferably, two was looked upon as an insurance against mortality, in the event some fatality strikes the only male child. Hence, the search for two male children, invariably led to larger families and, as a spin off, led to maltreatment and malnutrition of the female children.

-On the preference to open field defecation over the practice of using toilets in the house:

The villagers felt that community latrines, being nobody's property, were filthy and unusable. The toilets in the house would have to be kept clean and would need water. A very precious commodity, especially in the hot summers, water had to be fetched from a common well/storage place quite some distance away from the house.

-On malnutrition, the major cause for the two killer diseases- diarrhoea and respiratory infections. When special dietary supplements were provided to earmarked malnourished children under the feeding programme, the mothers diverted their regular food to the siblings, while the chosen child subsisted only on the supplements!

Such interactions were the defining moments, as doctors felt that their role was not just limited to curative health, but also to the all-important aspects of prevention. The doctor had to be an activist and a socio-political educator, much beyond just being a physical healer!

The above lessons learnt were thought over and this paved way for future programmes…….

Cluster immunization: 1982

Conceived as a 'crash programme', the execution required monthly visits from January to May of the year 1982. It was organized on a pre-announced day and time, coupled with entertainment in the form of educative cinemas and slide shows prior night. The philosophy was to ensure herd immunity for Measles, BCG, DPT, poliomyelitis in the under-five age group and Tetanus Toxoid in adult.

Achievement:

From 1983 onwards the vaccination load was limited to new born and newly-weds. With this, pregnant women needed only one dose of Tetanus toxoid, in their regular ante-natal checkups at the hospital after 7 months of pregnancy.

This proved, beyond doubt, the distinct edge of cluster immunization over institutional/hospital and door to door immunization, an unnecessary drag on the already over-strained healthcare budget.

The pioneering nature of this initiative is evident from the fact that the Government of the state of Maharashtra adopted 'cluster immunization' in the year 1996, a good decade and a half after the same was taken up by KHS, on recommendation by Prof. Jajoo.

Phase 2: 1985-2002

Evolution of Health insurance into Health assurance:

This era marked the evolution of the health insurance scheme into a health assurance scheme leading to comprehensive development. Priority of the villager was food, employment, education and health, in that order. The need of the hour was to evolve a solution tailored as per the socio-economic and political framework, to ensure community participation.

In the days that followed, the health insurance scheme developed onto a health assurance scheme, in the following ways:

The underlying philosophy of having a health service system equally accessible to every section of the society evolved with experience. The concept of contributing money according to each individual's capacity was established. A village fund for medical treatment, based on contribution of *Jowar*(Sorghum), collected at harvest time had been initiated. The contribution was as per the guidelines depending on the land holding. If 75% of the village families contributed to the village fund, the village was declared as insured and enjoyed the benefits of the scheme.

This way, the more economically challenged who are more likely to suffer from ill health, could avail of the scheme with the same rights as the economically privileged. In short, uniform health care to the poor and needy, which started with the Nagapur village, was introduced in 40 villages in a radius of 25 kilometres around the medical college in Sevagram, with better acceptance.

A 'not for profit' insurance scheme aimed primarily at the informal sector, formed on the basis of collective pooling of health risks with participation of members in the management, had taken form.

In contrast, the insurance system works on the basis of risk related contribution from every individual. By natural selection, the marginalized tend to get excluded from this, as their risk for the insurers tend to be higher.

The health insurance scheme with the afferent arm of capacity related contributions and the efferent arm of healthcare delivery in an egalitarian, need based manner regardless of the quantum of contribution, evolved into a 'Health Assurance Scheme'. The essence of assurance is 'an affirmation of just health care service' contrary to insurance which ensures 'financial aid' only for health contingency.

The *Jowar* collected from the village would be sold and the money deposited in the bank account of the village fund. The money remaining at the end of the year would be carried forward to the subsequent year's fund.

Occasionally, a portion of the fund would be transferred to a corpus, under the aegis of the Kasturba Health Society, and the interest accrued from this would be used for procuring drugs and organizing educational and development activities at village level. This formed the basis for the evolution of the **Village Education & Development Fund**.

The source of funding for the Health Assurance Scheme:

-Only 10% of the expenditure on the scheme was recovered from the contribution from the villagers as premium.

-The remaining 90% came from the hospital managed by Kasturba Health Society, which was a beneficiary of the Government funding.

The *Government funding* came from:

Central Government:

-Government of India, Ministry of health and family welfare, Department of health.

-*Gram Panchayat* (the governing body in each village), which received from the Government of India.

State Government:

-Department of Medical education and drugs, Government of Maharashtra.

The system ensured proper utilization of public money coming from the government, with contribution coming from the villagers, in the form of premium, giving the consumers a sense of entitlement.

***Highlights of the Health Assurance scheme*:**

-Accessible hospital services of optimum quality.

-Accountability of the healthcare system to the consumers.

-Affordability of the services by the poorest.

-Effective healthcare, the proof being nil maternal mortality and complete eradication of vaccine preventable diseases like measles, polio, tetanus, whooping cough from the year 1985.

-Enhancement of the self-confidence of the organizers.

-Participatory culture at the community level.

Thus, the experiment evolved with the involvement of and feedback from the people and transcended holistically to the priority needs of the people. In short, a socioeconomic upliftment of the '*daridranarayan*', the poorest in the economic strata, was being achieved with the trust and active participation of the people.

As the health assurance scheme evolved, the community participation evolved too, as follows:

-The initial phase- *Community complacence*- where the community observed as a mute spectator.

-The intermediate phase-*Community co-operation*-where the community offered manpower support.

-The final evolved phase-*Community partnership*-where the community offered material support for need based programmes and participated in the execution.

The whole *Jowar* health assurance experiment is an attempt at identifying respectable individuals, bringing them together, empowering them, inculcating a culture of decision making by consensus and initiating acts of common faith. This 'one step in the right direction', stemmimg from the philosophy of 'think globally and act locally', still fell short of *Gram Swarajya*, Prof. Jajoo's cherished dream of village self-reliance.

Gram Swarajya, as envisioned by Shri Vinoba Bhave, dreams of an ideal society based on principles of freedom and fraternity, wherein the poor and the downtrodden are embraced and empathized, leading them from darkness to light-*Tamsoma Jyotirgamaya*! Shri. Vinoba Bhave gave this message of Antyodaya-the emancipation of the poorest and the last man standing in the socio-economic hierarchy, to the world.

The interesting commentary that emerged was:

While the private insurance, working on the principle of financial risk sharing on 'no loss' basis, is unable to deliver the health care benefits to the poor, the health assurance at the KHS hospital, Sevagram, could meet its expenses within the limits of the per capita expenditure that government of India spends on health. (In the year 2002, the government allotted resources at Rs.250/capita/year).

This resource allotment had its shortcomings, too:

The mal-distribution of centrally pooled resources and the resultant failure of these pooled resources in reaching the periphery. A better way would have been by transferring the resources to the *Gram Sabha* (village governing body), which would negotiate the services from the providers for the consumers in their villages.

The concept of *Gram Sabha*, which is well detailed under the *Gramdan* act of the Indian Parliament, is the brainchild of Shri Vinoba Bhave. *Gram Sabha* constitutes of one adult male and female member of each family in the village and is the highest decision making body. The leaders are selected, not elected and decisions are taken by consensus. This is in sharp contrast with the *Panchayati Raj*, which is governed by the representatives elected by a narrow margin of 51% v/s 49% and hence a non pro-people democratic structure.

When 75% of the village population transfers the title of their land to the *Gram Sabha*, the village is designated as a *Gramdan* village. The ownership is collective and the villagers enjoy the right to plough, cultivate and consume the produce from their land, for generations to come. However, the land cannot be sold to anybody outside the village. This concept promotes co-operation, collective decision making and interdependence. By equating physical labour to intellectual labour, the exploitative structure is rooted out pavng the way for nurturing values of equality and freedom. The structure facilitates egalitarian society that survives by "bread labour"

The empowered *Gram Sabha*, which owns the resources and has the freedom to make decisions by consensus or overwhelming majority, is the key to *Gram Swarajya*. A living example of this is the village of Mendha (Lekha) in Gadchiroli district in the Vidarbha region of the state of Maharashtra, India.

Evolution of Health assurance scheme:

As the village health assurance scheme gained popularity, firm footing and support among the villagers, it was used as the carrot to introduce other reforms in the villages. In addition to the pre-condition of 75% participation, at least one of the following criteria needed to be fulfilled, to qualify for availing the benefits of health assurance scheme:

-Participation in the 'one house-one latrine' scheme with 100% coverage of the village families.

-Organizing 'lift irrigation' scheme for all village families.

-Electing Gram *Panchayat* (executive body in the village) unopposed by consensus, to root out rivalry and ensure better bonding and kinship.

By the year 2002, the various schemes available to the village, were as follows:

***Jowar* insurance scheme:**

-50% subsidy given on out-patient care.

-100% subsidy on all emergency indoor care.

-50% subsidy on elective admissions.

Subsidized family insurance scheme for rural areas:

With 75% of village families contributing Rs. 15/person/year, a 50% subsidy was provided on both the out-patient and in-patient services.

Indoor insurance scheme:

No insistence on the mandatory 75% participation by the village families.
Contributions at the rate of Rs 15/person/year ensured 50% subsidy on in-patient services only.

Health insurance for semi urban pockets and Wardha town:

With a contribution of Rs. 150/year/family of five, 50% subsidy on in-patient and out-patient services was provided.

One family could avail multiple schemes.

The phases of evolution:

1979-1985- The early days of health insurance.

1986-1994-Scheme offered to the entire village.

1995-1999-More than one scheme offered to the villagers.

From 2000 onwards-Scheme was made open to families that fulfilled the eligibility criteria.

The '*Ten commandments'* of health care delivery, emerged as follows:

For the political system:

-Structural change with both men and women treated as equal. Restrain exploitative private sector.

-Raise the credibility and standard of public hospitals as quality healthcare is the fundamental right of every citizen.

-Assure quality healthcare through Social Health Insurance to unorganized sector and facilitate affordable quality healthcare with preference to the poor.

-Distribute centrally pooled development resource on per capita basis to the *Gram Sabha* in the *Panchayat Raj* system.

For the Consumer:

-Contribute towards social health insurance, as per capacity and priority need.

For the Healthcare Delivery System:

-Survive on finance raised as repayments or contributions from *Gram Sabha*.

-Sensitization towards the 'right to health' of every citizen.

For the Doctors:

-Be a humble Scientist, be trustworthy to society to achieve professional empowerment.

-Know people, learn from them and be their partner in building upon what they have.

-Build a patient friendly ethos.

In conclusion, primary health care services to all, is an achievable goal even with the existing resources at less than 1% of GDP. A strong political will is required to decentralize it to the level of the *Gram Sabha*. The path for good health, thus charted, needed to ensure that the facilities available are utilized equally by the 'haves' and the 'have-nots'.

With the result, the resources provided for health by the Government, as portion of per capita of the public expenditure, was optimized and channelized.

With the success of the Health assurance scheme, other related development schemes to improve the per capita income and living standards in the villages, were being explored.

Health assurance scheme had its roots in the village of Nagapur, and so building upon the credibility achieved on the back of that successful model, an alternate income generation option in the form of Dairy development, was pursued.

Dairy development:

With farming dependent on rains, labour yielding low wages and cottage industry not having the guarantee of ready market, the dairy development scheme was resorted to, by default.

The milk producers from the village of Nagapur were selling their milk to the federation of the government in the neighbouring village of Karanji Bhoge. But, the remuneration received was barely enough to make both ends meet.

To address this, an attempt to revive the existing defunct milk co-operative society at Nagapur, was made in the year 1983.

The fully functional network for the dairy development included:

Milk co-operative Society:

The milk producers of Nagapur would collect cow's milk from their respective houses in utensils and get it to the milk co-operative society in their village.

The following stringent criteria were followed at the village milk co-operative society:

-Milk deposited would be tested for fat content and the rate would be fixed on the basis of the quality of milk. Low quality milk was not given any remuneration.

-Only cow milk would be entertained, milk from goat, buffalo would not be taken.

-Milk collected by the co-operative society would then go to *Goras Bhandaar* (a trust organized for cow protection) in Wardha town.

Goras Bhandaar:

A trust established with the blessings of Gandhiji and Vinoba Bhave for cow protection and rearing, an essential unit of the constructive programme in agriculture for the population. This mission was initiated by respected members who provided clean management and had the consumers as partners. It ensured supply of good quality milk and distributed it fresh, without the need for cold storage or pasteurization. It maintained high standards of quality control and supplied fresh milk, collected from villages twice a

day, in the morning and evening. Keeping the service charges for distributing milk to the bare minimum, it gave the highest support price of milk to the milk producer.

Evolution with time:

With good margins available, the milk co-operative society was spruced up at the village level. The co-operative society had a Secretary to take care of the daily affairs and an accountant for handling the money. These posts were honorary with Prof. Jajoo playing the role of the President. The co-operative society collected a nominal distribution charge from the milk producers, which took care of the daily activities. To weed out corruption and mal practices, the selection of the Secretary was made with consensus and monthly meetings were organized to thrash out differences and streamline policies.

Purchase of cows:

With the dairy business booming, the demand for high quality cows rose. Fortunately the *Go Seva Sangh* (an organization for the welfare of cows), with whose support cows were purchased, offered a 25% subsidy to the villagers on cow purchase. This subsidy, instead of being passed onto the villagers, was kept as a revolving fund. This fund served as corpus, from which villagers could draw loans at the rate of interest offered by banks. These loans were offered for a one year period and if the loans were returned within the said period, the interest would be returned. In case of default, interest would be retained and added onto the revolving fund.

Strict rules were laid down against loan defaulters with a condition of getting them debarred from the co-operative society. Since this was a profitable venture, nobody dared to default.

Increase in the revolving fund:

As the diary movement became prosperous, additional money was deducted at source from the remuneration to the milk producers, to increase the revolving fund. In addition to giving loans to the entrepreneurs for procuring cows, the scope of the revolving fund was now extended to provide loans for other necessities like:

-Purchase of land, motor pumps.

-Constructing house/Gobar gas plant.

-Digging well.

-Absorbing the default on loan, in case the procured cow died due to illness.

With more prosperity, more money was deducted at source, creating a development fund to be utilized for:

-Building a milk collection centre.

-Purchase of bull to avoid dependence on artificial insemination.

-Creation of cow-sheds, creating channels for collecting the refuse generated from the cows, for making compost manure in the soak pits.

-Subsidy on fodder production, fodder cutter and vermin composting sheds and other allied endeavors.

Thus, the development fund gave impetus to dairy and agriculture related activities. This, in turn, showed the various positive spin-offs, as follows:

Nagapur earned a reputation for high yielding cows and won the best livestock award in the district of Wardha.

On an average, each family started contributing 50 litres of high quality milk/day.

A piece of irrigated farm land was earmarked by each farmer exclusively for green fodder cultivation.

A non-partisan, transparent model with decentralization of power with regular meetings for creating consensual decisions, was evolved. A rational, feasible and replicable management system for the co-operative society was created. Prof. Jajoo gradually withdrew from the daily affairs and monthly meetings, only to remain as a guide, counselor, trustee and arbitrator.

Sanitation:

One toilet/house:

Open air defecation, squatting on either side of the road of the village, with the womenfolk using the entry road and the menfolk using the exit road, was a real problem. An age old and time tested compromise solution resorted to by the villagers, ended up being a real scourge in monsoon, causing diarrhea epidemics and leading to morbidity.

This led to the philosophy of one toilet/house. Execution of this philosophy turned out to be an experience in itself. On persuasion, one toilet was constructed for one poor worthy family of each caste in the chosen village. Three months later, on visiting the village for feedback, the team was shocked to find that the toilets were being used for:

-For bathing.

-Storing firewood and kitchen fuel.

-Sheltering goats.

On questioning, the responses were as follows:

Water for the family needs was always fetched by the women of the house from the common well in the village, which was almost a mile from the house, at times. The extra burden on the lady of the house to get one bucket of water from the well per person using the toilet, was very exacting. Anything less than a bucket ended up creating foul smell in the household.

In summers, water scarcity compounded the problem.

Expressing inability to use the agricultural fields in the monsoon for fear of snake bites and wading through the slush at odd hours without adequate lighting, the villagers preferred the well-lit entry and exit roads of the villages.

After keenly listening to the ground realities, the team went back to the drawing board and worked with the Centre of Science for Villages, a technical organization in Wardha town.

The model toilet was created with the following features:

-No water seal, so that as little as one litre of water, was needed for cleaning, which was similar to that used in open air defecation. The steep slope with slippery ceramic seat carried filth by gravity to a twin soak pit behind. The flap falling by gravity disconnected the soak pit opening.

The soak pit promoted dry decompensation. In contrast, wet decompensation seen with water seal latrines connected to septic tanks generated foul gases. The second soak pit could be connected as the first filled up and in a month's time, dry and useful manure could be lifted for the fields. The foul smell became a thing of the past.

The toilet was made in the residential premise, and had cement plastered walls, shining tin door, asbestos roof for privacy, with ornamental exit pipe with cap, from the soak pit.

Armed with this low cost, durable toilet model and working on the idea of complete conversion to 'one toilet/house' scheme, the experiment was started in the village of Karanji Bhoge with an assurance of 100% acceptance from the villagers. Anything less than complete acceptance meant failure of the project.

The finances for the project were outlined as follows:

-Contribution by the villagers- Done as per each one's capacity, defined on the basis of irrigated land owners, rain fed land owners and landless labourers.

-Contribution from the *Jawahar Yojana* fund, a Government of India fund given to the *Gram Panchayat*, which would be decided by the *Gram Sabha*.

-Contribution from the "Wardha Plan" – a State Government of Maharashtra scheme for development in the district of Wardha.

This financial model ensured that the village community felt a sense of ownership and stake in the project, with responsibility and self-esteem. Surprisingly, the community came out in full support, cutting across political factions, to achieve 100% sanitation.

The entire logistics of collecting beneficiaries' contribution, distribution of building materials, supervision of work, and arranging voluntary labour ,was handled by the villagers. This turned out to be a great achievement.

The Governor of the state of Maharashtra inaugurated the one house/toilet model of Karanji Bhoge. The model found acceptance from the state and the central government, which took it up for replication in the other districts of Maharashtra. As the state government stepped in, the whole project fell apart.

The obvious reasons for this abject failure were:

-Lack of quality control.

-Lack of community participation.

The resounding success of the efforts under the leadership of Prof. Jajoo and his team and the abject failure of the government sponsored efforts, shows that experiential learning and educational sharing, the twin philosophies on which the foundation of holistic rural health was laid, made the difference between success and failure.

Lift irrigation:

With the vast majority of villagers earning their livelihood from rain fed agriculture, and rainfall being erratic, a drought scenario emerged once every three years. It was imperative to work on irrigation, to reduce the dependence on rainfall.

The logistics of lift irrigation:

-Dam was constructed on a river under the government plan.

-Water from the dam was pumped and carried through wide bore pipes to a reservoir constructed on the highest and most centrally located farm land.

-Pipes from the reservoir carried the water to the respective farmlands, assisted by gravity.

Nuts and Bolts:

After meeting the Chief Engineer of irrigation department, four sites with stony bases for construction of dams on the rivers Bor and Dham, were selected.

As with all endeavours, the total participation of all villagers was mandatory. Other specific requirements for lift-irrigation, were as follows:

-Land for constructing the reservoir.

-Agreement on equitable distribution of water irrespective of irrigable land. For example, if the dam could hold water for 125 acres of land, and there were fifty beneficiaries, each farmer would get to irrigate 2.5 acres, irrespective of the land holdings.

-Creation of a co-operative society with the Secretary and office bearers was mandatory, as per law. To eschew elections and their political affiliations and fall-outs, the election process was converted to a

selection process, on the basis of 75% consensus, with a trustee/arbitrator. For this, the permission of the Registrar of Co-operative Societies was taken, who amended the constitution accordingly.

-Approaching the banks for sanctioning loan for the project, the first of which was planned in the village of Khadaka.

In the garb of sanctioning loans, the bank officials outsourced the key elements of engineering, procurement and construction of the project through a contractor to ensure kickbacks for themselves.

This turned out to be a painful lesson.

-Sorting out the problem of farmers ditching the movement at the last moment and spreading the liability among the others.

The lift irrigation project has been running successfully in Khadaka for the past twenty years and has been replicated in other villages like Dindoda.

Every success comes with a price.

Despite the success, some questions that confront the rationale of lift-irrigation are:

-Bank loans taken for the project had to be repaid, so farmers resorted to cash crops like sugarcane. With the result, farmers move away from cultivating food grains for their own consumption and sustenance.

-The agricultural produce had to be transacted in the markets, which are exploitative and remuneration to farmers was never commensurate with the efforts and finances pitched in.

The lack of continuous and consistent power supply is a huge dampener as the supply of water from the reservoir to the farmland is powered by pumps, which become non-functional without continuous power supply.

Phase 3: Soul searching, introspection and spiritual leanings.

Income generation programmes led to improvement in economic status and started breeding vices like alcohol, gambling and fierce party politics, in the respective villages. The prosperity ushered into the villages bred greed, selfishness and addictions. Menfolk were seen to enjoy the material benefit, without any difference in the quality of life for women.

The lesson learnt:

Cultural development must precede economic improvement, to ensure an effective and lasting change. This was the true turning point in the ethos of health assurance scheme. The underlying philosophy in

the health assurance scheme was to organize the people at the lowest ebb of society. So far, people came together only for their personal interest, hence it was only a 'self-serving' group. It was not an organization for social change, which needed to be founded on the altar of spirituality.

Introspection into the situation led to the understanding that poverty makes people interdependent and inculcates morality, but removal of poverty without simultaneous cultural growth, breeds vices and immorality.

The realization dawned that the right kind of community participation emerges when spiritual wisdom leads and lights! The philosophy of *Kruti Bhakti*-oneness with God through *Karma*-action and *Bhakti*-devotion, being adopted by followers of the *Swadhyay Parivar* (a group engaged in the discovery of self) in the neighbouring state of Gujarat, India. Professor Jajoo and members of his team visited them and found that the path of salvation is attained by channelizing the inner faith into actions, offering purpose to each one's life. The deep seated insecurities of life and the fear of death get harnessed by immersing oneself into the bliss of devotion. The path of devotion through *Karma* (purposeful action) offers calmness and tranquility to the mind. The lesson, thus, learnt was that the human mind evolves through vowful acts of faith.

This self- realization gave birth to programmes that necessitated pledge taking:

1992-*Vastra-Swavalamban*-self-reliance in clothing.

1993-Women's empowerment through organization of Self Help groups (SHG).

1995-The anti-liquor movement.

2000-Working for freedom from the exploitative market through organic farming for self reliance.

2008-*Anna Swavalamaban* : Sustainable agriculture for self reliance.

The *Jowar* insurance scheme was further tweaked at a conceptual level to ensure that families take this route of self-empowerment and betterment.

The families had to fulfill one of the following criteria:

-Membership of Self Help group-SHG.

-Undertake the experiment organic farming.

-Take the vow of *Vastra-Swavalamban*.

-Take active part in the study circle in the village.

Phase 4: Action on the outcome of the introspection

The spiritual ailments were countered by arousing the sense of devotion and faith hidden in the depth of the human beings. Combining this with reason and realism, the remedial actions were taken, like:

The birth of women Self Help Group (SHG)-a microfinance ecosystem and *Vitta Swavalamban*-economic independence:

Dada Dharmadhikari, the noted Gandhian, referred to women as 'the proletariat of the proletariat', meaning the poorest and most defenceless among the poor landless labour families. Women are hard-working, culturally sane and bear the brunt of all that is unjust and immoral in the social fabric. Hence, an initiative to organize this culturally sane section of society into Self Help groups (SHG) was undertaken. It was sheer coincidence that such SHG's were taking shape in Andhra Pradesh, another state in India and Bangladesh, a neighbouring country.

Initially, women came together and pooled their meager resources and inculcated a culture of decision making by consensus. As the movement started gaining momentum, money started coming in through linkages with banks. An unregistered body running entirely on faith, the office bearers, the organizer, record keeper, accountant, signatories of bank account changed every three years. The codes of conduct evolved through consensus. The transactions were made in cheque and decisions were made by participation and co-operation. Male interference was strictly prohibited. The credibility of SHG as a dependable source of financial support ensured that there were no loan defaulters.

For freedom from financial dependency, women's SHG's were formed among those living in the vicinity, with a maximum strength of twenty women. The savings were kept at a bare minimum of Rs.10/month for financial inclusion of wage earning women. A compound interest of 12% per annum was earned on each member's share of savings. With a vow to take all decisions by co-operation and mutual faith, the group started sharing their worries, agonies and problems. The carrot of inclusion in the popular *Jowar* Health Assurance Scheme, was a great incentive to maintain the credibility of the SHG. This group evolved into an educative forum and later, a forum for justice. In short, it turned out to be an amazing exercise in self- support, both financial and emotional.

Since the members could avail of crop loans, the status of women in the family changed from being the oppressed to the breadwinner of the family. In most cases the males in the families had been declared defaulters by banks. Looking at the track record and credibility over five years, banks extended their credit linkage which doubled every year, for groups with transparent financial transactions. It is important to understand that the families benefitting from this microfinance scheme were those who would not stand a chance for loan from banks on their own, due to poor credit worthiness. The bank extended credit to the group at the rate of 12% per annum, which the group loaned at the rate of 36%. From the income generated after offering the 12% compound interest on the member share, the rest was kept as a revolving fund. This revolving fund was utilized for:

-Micro-finance.

-Boosting credit linkages with banks.

-Common programmes like educative camps, study tours and meditation camp.

Some groups could extend finances to the tune of as much as rupees fifty thousand per member. This allowed women and their family liberation from the clutches of money lenders, who charged an exorbitant interest of 10% per month. With the corpus swelling, the income generated out of the interest started taking care of the loan requirements. With increase in the self-earned revolving fund up to rupees two lakhs, the goal of monetary self- reliance, was no longer a distant dream. In 2011, the SHG's had reduced their interest rates to 24%. With further increment in the revolving fund, the interest rates are expected to come down to 12%, equal to the interest rates charged by banks. The dream, however, is to reduce the interest rates to 4%, less than the rate at which banks offer crop loans. The SHG's emerged as a self –owned bank for its members. Any member opting to drop out received her savings and the 12% compound interest, but not her share of the revolving fund, which served as an effective deterrent against drop outs.

The SHG's also took up exchanges in the form of experiential sharing, educative trips and educational camps. . The education happened through religious songs by renowned religious saints and also by 'one to one' engagement among the villagers by fruitful discussions. Women came together to raise their voices against atrocities in the society and spontaneously the anti-liquor movement evolved.

Gradually, the status of women in the family and in the society went up and they could be seen getting vocal in the *Gram Sabha* meetings. Prof. Jajoo and his team, having earned the credibility with the health assurance scheme, served as partner, coordinator and watch dog in this educative process.

A simultaneous attempt to share experiential wisdom on organic farming and agriculture for sustenance and *Vastra Swavalamban*-self-reliance in clothing, was initiated. This study circle, which was meant for exchange of ideas and educational visits to the model work sites, became a part of the educational process.

Self reliance in cultivation:

Rather than being exploited by market forces and finding it difficult to get their due for the hard work done, cultivation for one's own sustenance, was inculcated. Since the farmers could not get returns for the crops produced, the only way was to seek freedom from the market forces. The idea was to convert agriculture into an act of faith, where one produced for self-consumption only.

The idea behind this was to introduce the farmers to innovations so that they built on their time tested techniques. Rather than resorting to hybrid seeds and chemical fertilizers, seed exchange programmes were started, wherein the local, robust seeds got exchanged and were prevented from getting extinct.

As the concept was preached by those who practiced it, educative tours to such role models were arranged and emulative actions adopted. As a consequence, agricultural practices saw the following radical changes:

Soil and water conservation:

Nurturing of bio-diversity:

Nature has its own way of allowing cultivation of different crops, by natural selection. Allowing nature to express itself without altering the bio-diversity pattern ensures soil protection. Contour making and water shed development became the backbone for conserving soil and water.

By avoiding hybrid seeds, chemical fertilizers/insecticides/pesticides, the concept of organic farming evolved. Embracing the gift of nature, shunning man made practices and abstaining from materialistic living, paved the way towards qualitative change in perspective towards life.

***Vastra-Swavalamban*-Self reliance in clothing:**

Another offshoot of the self-reliance philosophy, the idea was to process cloth from the cotton cultivated in the village. Shri. Damodar Wele, the pioneer of this philosophy, showed the way and the villagers visited his house, experienced the authenticity and truthfulness of the concept and took the vow.

Thus, Mahatma Gandhi's words 'those who wear should spin and those who spin should wear' were adopted by 250 families and they started spinning the *Ambar Charkha*,(named after Shri. Ambar Nathji, who designed the functional yarn spinning machine) and wore *Khadi*- handmade cloth. This experiment was another way in filtering out the righteous and virtuous among the crowd. The *Vastra-Swavalamban* strategy changed track with time and became more inclusive allowing the cotton growing farmers to get the cloth of their choice in exchange of organically grown cotton at a 'no profit no loss' basis. This barter system, in a way, protected them from the exploitative market.

Professor Ulhas Jajoo's thirty-five year old experiential journey transcending holistic rural health to achieve *Antyodaya*-betterment of the poorest of poor, through *Sarvodaya*-betterment of all in the society, has some committed stakeholders and supporters in the form of:

-Kasturba Health Society-KHS, for providing funding in all the social emancipation efforts.

-Kasturba Hospital and MGIMS medical college for the illustrated faculty and for the tertiary healthcare for patient care.

-Various committed team members, who have been included in the 'Image gallery' of this website.

-Alumni of MGIMS, who have been influenced by Professor Jajoo's teachings.