Learnings from the Project

"Building a Community Based, Resilient and Sustainable Food Security Model through Community Participation and Advocacy in Madhya Pradesh"

- A Process-based Fact Sheet



VIKAS SAMVAD

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Ensuring Food Security for Marginalised Communities in Four Districts of the State

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Abbreviations

AAM	Adivasi Adhikar Manch
ANM	Auxiliary Nurse and Midwife
ASHA	Accredited Social Health Activist
BMZ	Federal Ministry for Economic Cooperation and Development
CBM	Community Based Management
CBMM	Community Based Management of Malnutrition
CDPO	Child Development Project Officer
CHC	Community Health Centre
DM	District Magistrate
DPO	District Programme officer
DWCD	Department of Women and Child Development
ECCD	Early Childhood Care and Development
FBM	Facility Based Management
FDC	Forest Development Committee
FGD	Focussed Group Discussion
FRA	Forest Rights Act
ICDS	Integrated Child Development Services
IMR	Infant Mortality Rate
MAM	Moderately Acute Malnutrition
MDM	Mid-day Meal
MFP	Minor Forest Produce
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MIS	Management Information System

MUAC	Mid-upper Arm Circumference
NFSA	National Food Security Act
NFHS	National Family Health Survey
NHM	National Health Mission
NRC	Nutritional Rehabilitation Centre
OBC	Other Backward Classes
PDS	Public Distribution System
PHE	Public Health Engineering
SAM	Severe Acute Malnutrition
SC	Scheduled Caste
ST	Scheduled Tribe
TB	Tuberculosis
TDH	Terre Des Hommes
THR	Take Home Ration
U-3	Children under the age of 3 years
U-5	Children under the age of 5 years
VSS	Vikas Samvad Samiti

Introduction

Vision

Eliminate malnutrition and create a preventive model. No development is possible, unless childhood malnutrition is eliminated. Malnutrition cannot be eliminated unless all immediate, underlying and structural causes are included in the action plan with a community-centric approach.

Goal

Reduce MAM by 50% and SAM by 80% from the present level by the end of this phase and develop a protocol for CBMM.

Problem Analysis

Apropos child malnutrition, MP continues to bear the ignominy of the highest child malnutrition levels in India. Results of NFHS-4 show that U-5 children in the state are deeply afflicted with malnutrition; 43% children being underweight (low weight-for-age), 42% 'stunted' (low height-for-age) and 26% 'wasted' (low weight-for-height). NFHS-4 further reports that as many as 69% children in the age group of 6-59 months are anaemic; 9.2% children are in -3SD category of Wasting (Severe Wasting); 18.6% children are severely stunted and 14.3% children are severely underweight. Moreover, there is no protocol framework for CBM of MAM and SAM in place.

Concept

Under-nutrition and childhood Illnesses are barriers in achieving goals of human development, viz. quality education for all, economic and social

equality. Presently, these barriers are being dealt largely through facility-based management. In this approach, the essence of causal framework of under-nutrition gets short-changed. The framework classifies the causes of under-nutrition as Immediate Causes, Underlying Causes and Basic Causes. Existing approach limits its focus only on the Immediate Causes and relies just on the architecture of aanganwadi-centric Supplementary Nutrition Programme of ICDS and the NRCs for SAM children under the aegis of NHM. The ongoing approach is devoid of a policy imperative and programmatic protocol on CBMM.

VSS has started implementing an alternative model of child development - a comprehensive and robust causal framework of under-nutrition to eliminate malnutrition. VSS is working on sustainable agriculture and horticulture; mobilisation of community to reignite their faith in traditional-local resources whilst adopting the scientific practices and temperament; understanding our ecology and protecting it; orienting youths and children to enable them re-create their own development priorities and plans with an assertion of their right to play. Our objective is to develop women, youth and children leaders for social change processes; asking community to monitor government programmes and make demands for their entitlements and rights; giving equal space to the larger issues such as water scarcity and deforestation by providing support in rebuilding of water structures and plantations etc. VSS is implementing a strategic program of Early Childhood Care and Development Centres through community participation. This alternative thrust also covers issues of caste and gender. At the end of first two years, we see that community is taking ownership of this model and has started believing that it cannot develop unless it includes children's issues of health and nutrition in its endeavour.

VSS also advocates that all the areas of socio-economic life, like agriculture, kitchen garden, engagement in traditional practices, water, and forest; accountability in system's functioning and state programmes must work in tandem with each other. At the same time, there is a need to keep gender disparity and caste discrimination at bay.

CBM of SAM - As studies suggest that only 15% SAM children have medical complications, so only they are needed to be referred for a FBM of SAM, such as NRC. Rest 85% SAM Children can be treated and managed and be taken out of SAM category through CBM. CBM of SAM will involve child care through a

community/village based centre; hygiene and protection from infections; change in health seeking behaviour, food-nutrition practices; safe drinking water; locally prepared energy-rich food.

Structural Framework

The core idea is to develop an action strategy to eliminate childhood malnutrition by intervention on Causal Framework of Malnutrition. There is no single reason that traps children in the vicious cycle of poverty-malnutrition-disease; reasons are varied. Causal Framework suggests that causes of malnutrition can be classified as –

1. Immediate Causes

Lack of Food and High Disease Burden:

- Insufficient breast milk or barriers in ensuring complete breast feeding.
- Insufficient food availability/access.
- Lack of variety and diversity.
- Lack of energy and nutrients food.
- Lack of quantity.
- People, mostly women and children do not eat sufficient food.
- They lack absorption capacity.
- Due to diseases, they lose nutrients.

2. Underlying Causes

This category includes long term food deficit at family level (household food insecurity); inadequate care of women, adolescent and children; lack of proper feeding practices and lack of proper-essential health services.

3. Basic/Structural Causes

Social (gender, caste, disability, class etc.), Economic (unequal distribution of resources, centralization and unethical exploitation of

resources etc.) and Political (weakening of democratic values, shrinking voices and non-transparent policy making, caste politics etc.).

Strategies

- Development of Community Cadre - Nutrition Volunteers and Monitors
- Development of CBNRCs
- Informed Community Mobilization with a focus on development of women, youth and child leadership
- Community Organization Development for the purpose of community monitoring of social behavior and state services
- Participatory Learning and Action (PLA) on IYCF, Family Health Management, Management of SAM, Adolescent Health and Empowerment and System Strengthening.
- Community Nutrition and Health Need Assessment and Planning.
- Rapid Assessments and Mapping of local food resources.
- Strengthening of Village/Panchayat Committees through Dialogue, Trainings and Process Facilitation
- Community Mobilization Actions (Yatra, Interface with Administration etc.)
- Material Generation for learning and trainings.
- Capacity Building and Poshan Samvad with Government Program Functionaries/Frontline Workers/ Supervisory Staff – the concept of Poshan Samvad is to develop a dynamic discussion based platform for frontline workers.
- Interventions for protection and sustainability of ecology and environment.
- Advocacy and Perspective Building

MP is amongst the 10 poorest states in the country. It suffers the highest IMR at 47 according to SRS, Census of India, 2016.

State's child malnutrition data portrays a dismal picture. NFHS4 shows that

malnutrition amongst the U-5 children of the state is worst in the country. Stunting (height-for-age) in India is at 38.4%, wasting (weight-for-height) is at 21% and underweight (weight-for-age) children are 35.7%. In MP, these figures are at 42%, 25.8% and 42.8%, respectively.

State is also implementing central government-run programmes like ICDS through aanganwadis to meet children's nutritional needs and to provide them with early learning. Through aanganwadis, growth of children is monitored and they are immunized by ANMs to protect them from preventable diseases. It also has provisions for institutional care such as NRCs for treatment of SAM children.

Under NFSA 2013, poor families can purchase subsidised food grains every month from government. Pregnant women are entitled to receive maternity entitlements, and school going children have a right to receive a hot cooked meal a day. For financial security, families can demand work and get paid under MGNREGA. Under FRA, tribal people can demand land inside forests for their livelihood as individuals and also as a community. All these Acts have a well-defined grievance redressal mechanism as well as a provision for community social audit.

Despite multiple parallel programmes to ensure food and financial security for poor households, figures on child mortality and nutrition in MP remain dismal.

Although a child's health is directly linked to the quantity and quality of food, many other factors like a clean and hygienic living environment and proper absorption of food by body are also crucial. Moreover, malnutrition reduction or elimination is not a one-time intervention. It is an ongoing, continuous process.

For holistic development of a child, food is just one component. A child also needs care, attention and various physical and mental activities that help proper overall growth.

To address this grave issue of child malnutrition, a project called Dastak was initiated in 2015 in four districts of Madhya Pradesh by a Bhopal-based non-profit, VSS. It worked in close collaboration with a

Germany-based non-profit TDH with aim of eliminating malnutrition from villages dominated by most marginalised communities.

With a strong village-level support staff in each of the four districts, the project planned early and timely wide-ranging interventions in villages; more closely, in homes with infants and pregnant women. The biggest component of the project, therefore, was setting up ECCD centres in for U-5 children. Other components included promoting the use of local variety of seeds for farming, encouraging families to grow local, seasonal vegetables and fruits in their homes, strengthening village-level women, youth and children's committees for better monitoring of government programmes and to support children with sports equipment for mental and physical growth.

Along with developing standard operating protocols for managing child malnutrition at community level, the project set out a target to achieve 80% reduction in SAM, 60% reduction in MAM and prevent MAM from recurring. For long-term planning, mapping of local food resources in villages and community's nutrition and health assessment was also included in the project.

Interventions were devised keeping in mind the existing state-run programmes and schemes and how to maximise their use. Idea of Dastak was to make community aware and equip them with procedural understanding of schemes so that they can ensure their smooth functioning.

Project's focus is on SC and ST dominated areas. Historically, these communities have faced exclusion and even today are marginalised in various socio-economic aspects. Many of these caste and tribal groups have limited financial resources and over the years their dependence on natural resources has become vulnerable. Many SC and ST households are landless and employment for them in public and private sectors is uncertain as literacy levels are low.

It was clear that villages will have to take ownership of the work to be done under Dastak. Project is just handholding the villagers initially and strengthening their capacity and understanding.

There was special emphasis on forming and strengthening women, youth and children's committees in villages. These committees were to then take the issues to Gram Panchayats and to the block and district administration. Women also

play a crucial role in maintaining finances at household level. They are also primary caregivers. Hence, Dastak wanted to strengthen and involve women in decision making for better nutrition and health of community's children.

The interventions devised under Dastak complement each other. Areas where the work started are tough landscapes and as teams worked in villages, strategies were devised and moulded over time to suit respective villages' specific needs.

Members of Women's Committee in Kohka 47 Village, Umaria

District Profiles

Panna, Satna, Rewa and Umaria were selected for Dastak as these districts have some of the state's poorest child malnutrition numbers.

Panna lies in Bundelkhand region of the state while the other three fall in Baghelkhand region of central India. All district headquarters are 400-500 kilometres away from Bhopal. According to 2011 Census, all these districts have a fairly high tribal population; over 80% living in rural areas.

In Panna district, 87.7% population lives in rural areas. About 16.8% of district's population is tribal. 18.42% of its rural population is tribal and 5.38% of its urban population is tribal. Satna is an adjoining district with about 79% population in rural areas. About 14.4% of district's population is tribal. 17.04% of district's rural population is tribal and only 4.43% of its urban population is tribal. Rewa district has 83.3% population in rural areas. Tribal population of district is 13.19%. Of the total rural population of the district, 14.54% is tribal and 6.5% of the total urban population is tribal. In Umaria, 83% population is rural. 46.6% of the population of district is tribal. 51.44% of rural population is tribal and 23.44% of urban population is tribal.

In Panna district, Panna block was selected. Within Satna district's 10 blocks, the focus of the project further narrowed down to Majhgawan block. In Rewa, Jawa block was selected and in Umaria, it was Karkeli block.

Panna block is a part of Panna tehsil. 24.52% population of Panna tehsil, is tribal. 36.8% rural population of the tehsil is tribal and only 4.34% of its urban population is tribal. Majhgawan tehsil has the highest tribal population in the district. 28.84% population of Majhgawan is tribal. Its 34.27% rural population is

tribal and only 8.44% of urban population is tribal - Mawasi, Gond, Khairwar and Kol.

19.8% population of Jawa tehsil is tribal; all rural. Jawa has the second highest tribal population in Rewa district. In Umaria, Karkeli block lies in Bandhavgarh tehsil. Its 47.88% population is ST: with 58.51% rural population and 18.57% urban population ST. Bandhavgarh tehsil has third highest ST population in the district.

According to NFHS-4, 42.3% U-5 children in Panna district are stunted, 24% are wasted and 40.8% are underweight. About 10% children in Panna are severely wasted. In Satna district, 39.6% U-5 children are underweight. Stunting poses a stiff challenge with 41.2% U-5 children in the district are shorter for their age. About 26.6% U-5 children are wasted. 10.1% of U-5 children in the district are severely wasted.

Similarly, within the same age group, Rewa has about 40.4% children stunted, 18% children wasted and 36.2% children underweight. About 7.5% children in the district are severely wasted. In Umaria, 41.1% children are stunted, 27.4% children are wasted and 46.6% are underweight. Close to 9.4% children are severely wasted in the district.

Table - 1
Nutrition status of U-5 children in Dastak districts, as compared to the state and country figures

	PANNA	SATNA	REWA	UMARIA	MP	INDIA
Under-weight U-5 Children (%)	40.8	39.6	36.2	46.6	42.8	35.7
Stunted U-5 Children (%)	42.3	41.2	40.4	41.1	42	38.4
Wasted U-5 Children (%)	24	26.6	18	27.4	25.8	21
Severely wasted U-5 Children (%)	10	10.1	7.5	9.4	9.2	7.5

A clear link to malnutrition can be identified with poor breastfeeding practices. As per NFHS-4, in Panna district, only 32% of U-3 children were breastfed within one hour of birth. Children under six months who were exclusively breastfed were at 55.5%. In the age group 6-23 months, only 12.6% children receive an adequate diet.

In Satna, only 33% U-3 children below three years were breastfed within one hour of birth. In Rewa, the figure is at 44.8% and in Umaria, it is at 37.2%. In exclusive breastfeeding for children under six months, Satna is at 55.7%, Rewa 46.3% and Umaria 36.9%. Further data for children between 6 months and 23 months shows that only 4.1% children in Satna are receiving an adequate diet. Only 5% children in the same age group are getting the required diet for healthy growth in Rewa and in Umaria, it is around 8.6%.

As per Annual Health Survey, Census 2011, in Panna out of every 1,000 live births, 140 U-5 children die. Out of these, 93 children die even before completing one year of life. In Satna, 130 U-5 children die per 1,000 live births. Of these, 90 children die within one year of birth. In Rewa, these figures are 102 and 73 respectively. While in Umaria, these figures are 110 and 63 respectively. Mortality rate of girl children is 10% more than that of boys. Mortality rates are also higher in marginalised communities like SCs and STs.

Focus of Dastak was to target these malnourished children and to devise mechanism wherein the community takes charge of health of its children with minimum dependence on outside resources. To achieve these goals, villages have to become self-reliant with regard to food security. Limited resources and adverse weather conditions make the task daunting.

Panna has large scale stone, sand and diamond mining. The block is also under a protected tiger reserve, keeping parts of its forests out of bounds for the local tribes. Majhgawan and Karkeli, on the other hand have rocky landscape and limited land under cultivation. Jawa has limited agriculture with people mostly employed as miners or as daily wage workers.

Panna and Majhgawan faced drought in 2014 and 2015, Karkeli had drought in 2015. In 2016, excessive rains in Panna, Satna and Rewa destroyed whatever little produce farmers had. Since most of the agriculture here is rain-fed, land under cultivation has further shrunk because of inclement weather.

Tribal populations depend heavily on forest produce for their food requirements and nutritional needs. They also sell MFP to augment income. However, with restricted entry inside forests, many households have lost their means of survival. Some families had their agricultural land inside forest area, which they cannot use for cultivation anymore.

Methodology

In Panna, an NGO, 'Prithvi Trust' joined VSS to work in Dastak villages, and in Majhgawan, NGO 'Adivasi Adhikar Manch' is working. In Karkeli, 'Zenith Youth Foundation' and in Jawa it is 'Revanchal Dalit Adivasi Seva Sansthan'; all non-profit organisations.

Blocks were selected by respective NGOs. For instance, AAM has been working with women and children in several villages of Majhgawan and 'Prithvi Trust' has been working with mining labourers in Panna villages. In Rewa, the NGO has been working for several years with marginalised communities and in Umaria, the NGO team had worked with villages on malnutrition and water related problems.

All the blocks selected were backward with high tribal populations. Health statistics, as mentioned earlier, were also poor. Within these blocks, only those villages were selected for Dastak where no earlier interventions by any NGO or an individual had happened.

Through purposive sampling, the teams selected 25 villages each in block. Villagers were told about child malnutrition and how the NGOs plan to address it. In the meetings villagers were asked how they want the project to run and if an ECCD centre (or a Baalwadi) is set up in the village, will they support it?

Once the locations of Baalwadis were decided, the block and district administrators in all four districts were informed. In villages, a situation analysis was done in terms of child malnutrition, women's health, access to government schemes and health care centres.

It was decided to set up Baalwadis in two villages of each block. In Panna,

Majhgawan and Jawa, villages which did not have aanganwadis were selected for Baalwadis. In Umaria, the NGO decided to set up Baalwadis in villages which already had aanganwadis. Villages finalised for intervention were located in six panchayats. Total families covered under Dastak were 12,991 and total population targeted was 62,866.

In Panna, 25 villages were selected which covered a population of 18,525 or 3,019 households. In Panna block, some villages selected are inside the buffer zone of the wildlife sanctuary and in and around the mining zone.

Eggs were added in the Baalwadi menu after taking approvals from the respective Gram sabhas

In Majhgawan, 24 villages with additional 12 hamlets, which were far from the main villages, were selected under Dastak. These covered 2,709 households with a total population of 13,859. In Jawa, 26 villages were selected which covered 3,583 households with total population of 15,334. In Karkeli in 25 villages, 3,680 households with a population of 15,148 were covered.

It was decided that each Baalwadi would be able to serve 15 children in the age-group of six months-three years. But since children do not enter schools till they turn six, in villages not having aanganwadis, U-5 children were also coming daily. Project had deliberately kept the age limit till three years to avoid conflict with the existing aanganwadis which have a provision of keeping children between three-six years of age.

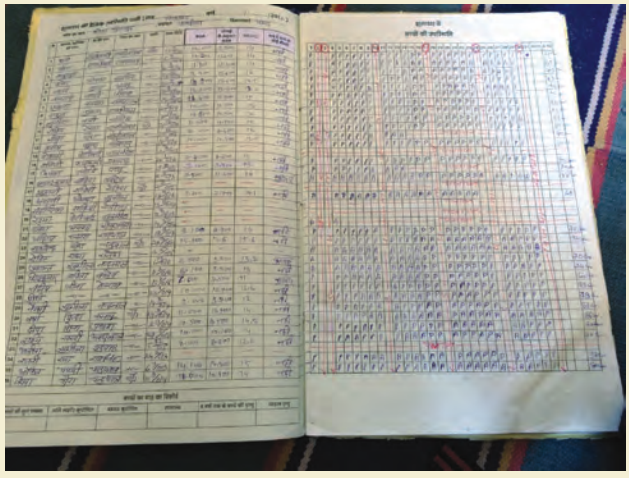
Since in the absence of aanganwadis in some of the project villages older children were also visiting Baalwadis regularly, Dastak raised the age limit from three years to five years in such centres. In Baalwadis of Karkeli, the age limit remained three years as children between three-six years are visiting aanganwadis.

Two women, with primary school education, at least, were selected in each Baalwadi as caretakers. These women were then trained in EECDs. Besides this, they were also taught how to weigh measure and record the growth of children. At Baalwadis, monthly records of height, weight and MUAC are maintained per

child. Workers were taught how to identify SAM and MAM children.

Data is sent from the Baalwadis to VSS office in Bhopal where it is checked for any irregularities. In case of any error, Baalwadi workers are required to check on the field and report back. This exercise takes place once every 2-3 months.

Every six months a development report based on the analysis is released by VSS. It mentions how many children are registered at the Baalwadis, how many are malnourished and how many pregnant women and lactating mothers are in Dastak villages.



Details of each child is mentioned in the registers maintained at the Baalwadis

A baseline survey was conducted between September and November, 2016 in nine villages in each block. Primary data were collected at the household level. Detailed questions were asked about the access to state schemes such as ICDS and MDM. Households were asked about their access to health care and food security. Nutritional status of U-5 children was recorded besides other details.

Total 36 villages with 4,688 households were covered under the baseline survey. Out of these households, 988 (or 20%) houses had detailed household questions answered. FGDs were also held.

To monitor growth patterns of children in project villages, MIS is conducted regularly in the villages without Baalwadis. In such villages, malnourished children are monitored every month.

Each block has five people from the NGO teams and each team member has five villages under them. NGO teams record children's height, weight and MUAC in all project villages. Each member has a weighing machine, a height tape and a MUAC tape. Data collected by the NGO members are sent to VSS

A Baalwadi worker recording height of a child

office. Data analysers at VSS monitor growth trends in villages and suggest treatment, if needed. VSS team members also visit villages and cross-check Dastak implementation.

In 2016 and in 2017, MIS was conducted every three months. From 2018, Dastak has decided to conduct it once every four months; in three months, it is difficult to meaningfully analyse the data.

Under Dastak, interventions other than setting up Baalwadis were also designed to aim food security. One such intervention was giving vegetable seeds to families for kitchen gardens. In 2016, local vegetable seeds were procured from horticulture department to distribute to families.

Families with malnourished children and pregnant women were prioritised while distributing seeds. Some families also volunteered to grow vegetables. Seeds saved by such families were further distributed to other houses in the villages.

Another intervention for making communities food-secure was to provide them local seeds. Seeds in the first Dastak year were provided to farmers by VSS. Farmers were encouraged to sow using chemical-free organic practices. Some villages could save enough seeds so as to preserve them as seed banks.

Women, youth and children's committees were formed in villages to enable them to actively participate in village awareness and grievance redressal activities. These committees with the help of NGOs addressed many long-standing problems in villages like repairing hand pumps, clearing pending work payments, setting up school playgrounds and aanganwadis.

These committees actively engaged with village and panchayat-level statutory committees for smooth functioning of various government programmes. Under each village five such committees operate. These are for health and sanitation, MGNREGA, school management, FDC and gram-panchayat.

Seeds saved in a seed bank in Khairaha Siyanagar village, Rewa

Sports kits were distributed to children in each project village under the supervision of children and youth committee members. Idea was to break gender, caste and religious barriers through sports. This is beneficial for their physical development and helps inculcate a team spirit in them.

While working in villages, NGO teams saw families suffering from severe water crisis. In many villages, need-based interventions to augment water sources had to be done. Without water, villages see large scale migrations which have an adverse impact on children's health.

This report is written with the purpose of collating different works done by various NGOs under the larger mascot: Dastak. VSS briefed the rapporteur about Dastak. All four districts were then visited for a reality check. All eight Baalwadis were visited for documentation purpose and for interaction with Baalwadi workers. Families were also interviewed. Villages other than those with functioning Baalwadis were also visited. Agricultural fields, kitchen gardens, fishery ponds, water projects undertaken by Dastak and other facilities in villages were also visited. Rapporteur was provided with MIS data and other relevant data on Dastak by VSS and concerned NGOs' district offices.

Village Scenarios and Project Interventions

According to the baseline survey, almost 66% of population in project area is STs - Gond, Baiga, Kol and Mawasi. Another 12% population is SCs. Survey found that more than 80% of the respondents had average monthly household income of less than Rs. 5,000. Only 45% of those surveyed owned any agricultural land. Out of these 40% owned less than five acres. Over 30% of the respondents said that they have to go to bed hungry, at times, due to lack of food.

Amongst the surveyed households, only 34% U-3 children accessing aanganwadi services had received THR in the last month. 76% U-6 children are being weighed in aanganwadis and only 19% children between three-six years of age had received hot cooked meal for more than 20 days in the month gone by.

Most of the families are either landless or have very small pieces of land, not enough to sustain them. Families have also lost faith in MGNREGA, which could ensure them at least some days of work in a year. People had stopped demanding work because of long payment delays and not getting work when needed.

An additional problem along with lack of employment and poor health status was water scarcity. Prior to Dastak, villages from three districts were reeling under severe drought. In Umaria, though drought was not announced, rainfall was inadequate to support agriculture. Households could barely meet their drinking water and food requirements.

In 2015, when NGO teams started visiting villages and held meetings with families, biggest demand was to fix the water sources. Lack of water forced villagers to migrate to cities. Lack of employment opportunities was another reason for their seasonal migration. Those who stay behind depend heavily either

on daily wage work which is uncertain or on labour on farms, which were mostly devastated by extreme weather conditions.

1. Drought

Since 2013, Baghelkhand and Bundelkand regions have been drought-affected. Rainfall has been shrinking over the years which has not only affected agriculture but has put the region into severe drinking water crisis. Ground water is drooping fast; in desperation, villagers are digging bores as deep as 500-600 feet in hope of water. In Panna, drought has affected livelihood in all the 25 project villages. Acute water crisis also brought shortage of fodder with it. This caused death of almost 900 cattle; goats and chicken, which are a source of milk and protein, especially for children.

All the project villages have been facing severe drought for years

The first step of crisis management was to write to the state authorities for urgent water relief. As this did not work, people from three of the 25 villages along with NGO coordinators went on a hunger strike for six hours under scorching heat. State administrator then provided potable water in a tanker for a short-term relief.

In Satna also, the team wrote to state administration about water crisis. Departments arranged water tankers for emergency use and also repaired hand-pumps. Besides this, with the help of NGOs, villagers urged the district administration about cleaning and deepening drinking water sources.

In Rewa, in 16 out of 26 project villages, there was no water for drinking and sundry use. Women and children, especially adolescents started queuing up near water sources at night itself to fetch few buckets of water by digging dried water bodies. After repeated requests, government provided water tanker for emergency use.

In Umaria 15 out of 25 villages were affected by severe drought and here again relief was sought through government water tankers.

2. Floods

In June-July 2016, soon after Dastak started, monsoons brought flash floods in Panna, Satna and Rewa which led to flooding and large scale destruction in villages. Villages near the overflowing rivers were partially submerged. Many houses were broken, people lost their cattle, valuables and crucial government identity cards without which they could not receive their entitlements.

Flood water also damaged whatever standing crops farmers had. Also, July is the sowing season and excess rain water made it difficult for farmers to work on the next crop. Villages ran out of ration and people found no work. Relief work also could not reach out to some villages which had been cut off from the roads.

In Panna district, two big dams were washed away because of which more than 200 mud houses were damaged in Dastak villages. In Rewa, initially, the government staff could not reach the affected areas as the routes were blocked. In Ovari village in Jawa, a bridge over a river which connects the village to the road broke.

Under Dastak, there was no separate budget for such relief work. Request was made to BMZ, a project partner, for immediate help. Damaged areas were mapped by NGOs and a list of essential items was made. Temporary relief was provided to families whose homes

Family Nutriton and Health & Hygiene Kit for Month distributed to flood affected families

were damaged and those who had no food. Families with children under six and pregnant and lactating women were given priority.

Relief material consisted of pulses, flour, oil, sugar, spices, tea, enough to last for 15 days. Food for U-6 children and pregnant and nursing mothers was also given. This included biscuits, laddoos of oilseeds and parched rice. A hygiene kit with sanitary pads, bath soaps, and phenyl bottle, washing soaps, washing powder, mosquito nets and coils was also given.

With the help of government officials, NGOs organized health camps in villages. They sent doctors, nurses and supplied medicines in the affected areas. State also provided some relief money to the affected families.

Table - 2

Details of relief material given in the flood affected areas

Distrcit	Affected Villages	No. of affected families who received food & nutrition support	Relief material provided		No. of health camps in villages		No. of people who received medicines & were referred to health centres	Amount of water cleaning powder distributed (in Kgs)
			Children	Pregnant & Lactating women	Health camps	Villages covered		
PANNA	25	190	370	235	6	25	190	600
SATNA	24	225	583	65	15	15	782	3,000
REWA	26	321	746	64	9	25	447	1,200

When the villages saw that Dastak teams could be relied upon in distress, it built an environment of mutual trust. This trust then helped the NGOs take the work of addressing child malnutrition forward with much more commitment and involvement from the community.

Water Projects

When NGO teams started deliberating upon Dastak, the first area where villagers wanted intervention was water. First drought and immediately after that, floods, had left the villages in disarray. There was a severe shortage of drinking water and old water sources stood damaged.

Wells in the villages were full of garbage and their openings were covered with shrubs and bushes. In some villages, villagers had sent multiple requests to village panchayat but that had gone a-begging.

In such a situation, Dastak had to first fix water sources in villages. Teams started discussing with various communities on what help they required. Teams started by mapping water resources each village had and assessing whether water sources needed repair.

Some of works included deepening and repairing of ponds, wells, hand pumps and natural springs. NGO teams also helped village committees in drafting applications to concerned government departments such as Rural Engineering Service and PHE to initiate some repair works.

Despite limited resources, with community participation and local knowledge, the work of revival of water sources became a possibility. In almost all the project villages in the four blocks wherever villages contributed their labour, they were partially paid cash from project funds, and for the rest of their labour, packets

from an NGO Goonj were provided to them - packets of clothes for adults and children, shoes, utensils and toys.

In Panna, four ponds have been deepened and eight drinking water sources have been repaired, cleaned or deepened. Total 56 hand pumps, four bores and six taps have been resurrected. With the help of NGO teams and villagers, total 11 new wells, eight new bores and 15 new hand-pumps have been rendered functional.

In Majhgawan, out of the 24 project villages, 11 were facing severe water problems. With the help of NGO, 23 wells were either cleaned or deepened or both, through community labour. Four new constructions are currently underway.

In Jawa, in 26 project villages, 65 hand-pumps out of total 198 were not working. These were repaired with PHE's help. About 34 hand-pumps were fixed using funds from Dastak. Villagers also contributed Rs 20 each for the expenses, and for the repairs they put in their labour.

Since 2016 in Jawa, 27 wells have been cleaned, deepened and their parapet constructed. Villagers contributed for it in the form of labour and in return they were paid money for a few days' labour and for the rest of their work they were given packets from an NGO, Goonj. Over 1,300 families benefited with this repair work.

In Karkeli, in Dastak villages, 211 applications were filed either for repairing of bore wells and hand-pumps or for installation of new ones. Out of these 128 applications were approved. Under Nal Jal Yojana, four villages filed applications out of which one got due repairs. One pond was deepened and for another pond, its catchment area was laid. Around 50 villagers worked for it and they were paid partially in cash and for the rest of it, they were given Goonj packets.

In 2016 and 2017, total 316 (Panna-78, Satna-23, Rewa-79 and Umaria-136) local water resources were cleaned, repaired and revived and 70 new water sources were developed under Dastak.

1. Kota Gunjapur Village, Panna

It is a tribal village with 11 wells. Pond in the village was dry and through commu-

nity labour, villagers deepened it to retain water. With water in the pond, three wells around it also got recharged. The pond now has water for six months in a year and the wells have water for 12 months. In 2017, these recharged wells helped to have three rounds of crops in the fields close by.

One of the wells which was recharged with deepening of the nearby pond

2. Kalyanpur Village, Panna

Pond in this village was deepened and a mud boundary wall was also made around it. But last time when water collected here, it could not be held. This will have to be repaired again.

Water body before the repair work

3. Tilai Chuha Village, Majhgawan

The water source nearest to Tilai Chuha village was not covered by any boundary wall earlier. It is an old water source and has been in use for decades. But, silt and mud had accumulated at its bottom reducing the natural well's area. It also used to dry up early. Hence, agricultural fields around it could not use its

Final structure after the work was complete

inadequate water for irrigation.

This was repaired in January. A boundary was made around it and with the villagers' collective labour dirt from the bottom was cleared. Cement and other construction material were provided by the NGO and rest of the work that villagers pitch in were returned with Goonj packets.

4. Bhatawa Village, Majhgawan

Less than a kilometre from the village there is a perennial natural underground spring. Water used to collect here like in a pit and because of lack of proper boundary, animals used to pollute the water and make it undrinkable for humans.

Water body before repair

When NGO team visited the village, villagers requested to have the water source fixed first. They decided to contribute in the form of their labour, while NGO decided to contribute cement and sand required for construction.

Villagers repairing the water source

This work took two months to complete. It is called Kusmak Kund. The mud, silt and garbage that had lined the spring were dug out and a clear high-rise boundary was made around it. A separate small tank for animals is also made on the side of the well. Over 300 families, all STs, now benefit from it.

5. Bada Talab Village, Majhgawan

Bada Talab is a big village in the region with over 1,000 households. About 600 are Mawasi households and the rest are of Yadavs and other castes. Despite this big pond, Mawasis in the village had severe drinking water problems. Only source of drinking water for these families was a hand-pump about two to three kilometres away. Even here, because of their caste, they were not allowed to take water. Mawasis, however, insisted on using same hand pump as they had no other source of drinking water. For this, often they got into fights with other castes.

Well before repairing

When the NGO team visited the village, they learnt that there was an old well, very close to the pond, which was functional about 25 years ago. Over the years, it had gone into disuse. Villagers had given many requests to panchayat to revive it, but to no avail.

Well after repairing

With the help of community, the NGO team cleaned the area around the pond and were able to find the well which was covered under shrubs. With basic material help from the NGO and community's labour, the well was cleaned and deepened. A parapet was made around it and now it is used by villagers. Work on the

Villagers at work on the field

well started in 2016 and after basic cleaning, people started using water. Finishing work on the well was complete by December 2017. Over 65 Mawasi families helped in the construction work and in return they received Goonj packets.

6. Devlaha Village, Majhgawan

Water harvesting in Devlaha village has started as an experiment. Mahavir Mawasi, a farmer of the village with 7.5 acre of land has donated five acre for a manmade pit in his field to hold the rain water.

One to three feet khantis or pits are dug on 1.5 bigha land of his farm. On one side of these pits is a baandh (a high mud wall) padded with rocks to prevent the mud from sliding. On the other side of the baandh villagers have put dry shrubs so that the animals don't climb on it.

Mahavir and farmers who have land for the baandh on the pond made under Dastak project

Mahavir's field is surrounded by hills and when it rains, water flows down from the hills and collects on the plains where his filed is. In absence of any barrier, the water flows out to lower plains in a pond, 12 kilometres away from his field. Because there is no method to store this water, in dry season, farmers who have fields there cannot irrigate their fields. Only the fields located close to the pond can irrigate well. Almost all this land close to water source is owned by the Yadavas.

There are nine wells on the other side of the baandh. These are spread across 45 acres of fields. If their experiment is successful, villagers are hopeful that all these wells will be recharged as well. The rain water will collect in the pits, and the baandh will stop the water from flowing out. The stored water can then be transferred to far-off fields through a pipe.

7. Suhawal Khurd Village, Jawa

In Suhawal Khurd village, water table has been falling. Women walk for one kilometre to get water. People start queuing at hand-pumps from four in the morning. In 2018, village demanded a cement water tank through which, they claim, at least eight villages will benefit. With the help of NGOs, village committees have written to PHE and the District Magistrate.

8. Kulhua Village, Jawa

The pond in Kulhua village is surrounded by 300 acre of agricultural land. But water here never remained stationary. Villagers asked for deepening of the pond and construction of a raised mud platform around it. People from two villages – Mailokhar and Kulhua worked for it. They put their labour in. Some workers gave their labour for free. Other villagers were given a few days' money plus Goonj packets.

9. Ghaduai Village, Jawa

The well in this village was covered with mud. Villagers demanded for its cleaning through blasting and deepening. The well used to have water till March; by April it used to start drying. Villagers were hopeful that if it rains in summers, it will charge-up again. But because of drought, it did not fill to its capacity. In 2017, it was cleaned again. If it is maintained properly, its water stays for 10 months a year. At least 15 nearby families can meet their water requirements for drinking, kitchen gardens and for irrigating about 15 acre of fields from this well.

10. Ovari Village, Jawa

The village had a well which used to dry in summers. With NGO's help its blasting and cleaning was done in 2016. For the last two years now, the well has year-long water. In 2016, resources and funds for its repair work were provided by the NGO. In 2017, villagers contributed money on their own and cleaned it. The village is surrounded by hills and with the deepening; the well is recharged through the mountains.

11. Karaundhi Village, Karkeli

Kherdai pond

The village has a pond, called Kherdai, which has water for full 12 months. Since 2016, the village has been experimenting with a fishery which has been a success. Villagers are now demanding deepening and extending this pond. With the help of NGO, budget for the work will be determined and the concerned authorities will be approached. Village used to have a natural spring very close to the pond. It was converted into a well long time back, but its parapet is broken now. When it rains, dirty muddy water gets inside the well making it unusable. Village committees have also been demanding its repairing and will take it forward with the help of the NGO. Village has about 100 houses that depend on these two sources.

Village has another pond, Pujha talaab, slightly above Kherdai pond but it remains dry most of the year. It has poor catchment area that is why the rain water doesn't get collected here. Between the hills and this pond, there are check dams made long ago by government. When the NGO teams visited, villagers demanded a way in which these check dams get connected to this pond. Water from hills behind this pond goes to a drain. From the drain it directly flows to Kherdai pond and overflows for four months from there. Villagers wanted drain water to be diverted to Pujha pond so that water can flow to Kherdai pond via

Pujha pond.

Before : Diversions made

After : Diversions made

With the help from NGO, in 2017 they deepened Pujha pond and made a diversion on the drain so that the water enters the pond. The fertile soil which was removed during the deepening of the pond was used as manure for the fields. About five acre land has been used for the whole exercise. Once the deepening of the pond is done and water gets filled, the villagers plan to expand fishery to this pond as well. The gram panchayat sanctioned a budget of rupees three lakh for the deepening of Pujha pond.

12. Birhulia Village, Karkeli

About 500 metres from Pujha pond is a well which falls under Birholia village. It was a natural spring and the water used to get polluted in absence of any permanent structure. NGO team helped deepen and widen the well and a parapet was made around it. The work was done in December 2017 and about 50 houses benefit from it.

13. Jhangela Village, Karkeli

There is one drain in the village where the rain water flows. For at least five months in a year, it remains dry. After talking to the villagers, in January 2017, NGO made temporary obstructions at five places en route. These stoppages were made at a distance of one kilometre each. Once water stops in the drain, the natural springs en route will also recharge.

Water in the wells recharges at night and villagers use that water in the morning. Once it rains and the drain recharges the natural springs, water in the wells will last longer. Villagers contributed their labour for repair and construction work.

Temporary stoppages made on the course of the drain

Wells get slowly recharged when the water stops in the drain

14. Bajakund Village, Karkeli

A well in the village is made on a pond bed. When it rains, the pond fills in and the pond water gets inside the well, making it unusable for drinking. The pond dried in March and the villagers wanted the well to be deepened and raised so that the

Incomplete work on building a well in the village

Result of deepening of pond during monsoon (above mentioned)

water remains clean. With the help of NGO, work started in the village in October 2017, but it was stalled as people were busy with work on their fields. It will resume as soon as the crop season is over.

15. Kohka 47 Village, Karkeli

Pond deepening in the village happened in January 2018 with the villagers' labour. The place where the pond is, the water had dried and bushes had grown around it. The villagers were given Goonj packets along with money for two days' labour. This year, the pond has very little water left and its cleaning will have to be done again.

Fisheries

In Karkeli, as NGO teams were discussing ways to improve nutritional status in villages, Karaunji village decided to experiment with fish cultivation. Fish is rich in protein and it is also an acceptable food in tribal households. After discussions with the villagers, it was decided that fish seeds will be purchased and added in Kherdai pond in the village which has water throughout the year.

Dastak initially had no budget for this intervention, but Karaundi village was lucky as it had a water body inside the village. At the time when the experiment was started, there were three villages which had water bodies to support fish. Money for fish seeds, therefore, was taken by the NGO team in Umaria from the money for agricultural seeds budget.

Initiative started in 2016 by farmers from three villages. They bought 35,000 fish seeds worth Rs 10,000 to be put in four ponds. It started in July and continued till November when there was enough water to support fish. In Kherdai pond, because of water, the fish are still surviving. In 2016, about 100 families could cook and eat fish.

Villagers with their catch

Currently there is only one pond where fishing still happens, that is, in Kherdai pond. About 93 families benefit from it. Rest of the ponds have dried out. In Janghela village, when the fish were available, 110 families were being benefitted. Villagers are keen to revive it as soon as the ponds fill up with rain water again.

Kitchen Gardens

One of the most direct Dastak interventions targeting people's homes was kitchen gardens. To ensure home-based nutritious food to their children, families were encouraged by NGO teams to grow vegetables in open areas in their houses where they discard waste water.

Indigenous vegetable seeds were given free to families in Dastak villages. Seeds were later accessed from horticulture department. Many families already know how to grow vegetables and some of them were already growing three to four varieties. NGOs encouraged them to take it up on a larger scale and grow it in areas where they were throwing waste water.

Horticulture department also needed help in distributing seeds to houses, so NGO teams came handy. Households were told to grow these near water sources, like in areas where they take a bath. Input for this initiative is less and only local reusable seeds were provided to households.

In Panna, kitchen garden was the first intervention in villages. In 2015, the NGO distributed eight types of seeds to 500 families. These varieties viz. zucchini, pumpkin, brinjal, lady finger, bitter gourd, beans, green beans and spinach need

very little water to grow.

759 households were given seeds for nine types of vegetables by December 2017. Total production was 75,900 kilograms of vegetables worth Rs. 6, 07,200. Total production for two years was 1, 25,900 kilograms worth Rs 10, 07,200.

In Kota Gunjapur village, Siya Bai runs a kitchen garden in her backyard. The family of seven started growing vegetables like lady finger, brinjal, tomato, kumda, jhumak, zucchini and bitter gourd in the area where used water was thrown. Ash is used to wash utensils, so the used water is chemical free.

Before she started kitchen garden, she used to travel 25 kilometres to Panna town once a week to buy vegetables. She had to walk five kilometres to catch a bus for Panna and spend Rs 10 per person one way for the bus ride. Now the family doesn't buy vegetables from the market. Siya Bai says that earlier there were days when her family used to stay hungry on many days or migrate to cities as road construction workers. Now they have food security all year long and the family has not migrated since 2016. They can save up to Rs 5,000-6,000 a year as they save on the money spent living outside home. In the village now, 46 houses have kitchen gardens.

In Majhgawan in 2016, 112 families were given seeds for kitchen garden. While distributing seeds, families with SAM children were given priority. In 2017, horticulture department gave 2,000 packets of seeds. NGOs added another 3-4 vegetable seeds which they could access. Some families took excess seeds from neighbours and they were then dried and reused. This was the best year for kitchen gardens in Majhgawan. Currently, approximately 2,500 families have kitchen gardens under the programme in the block.

In Jawa in 2016, 150 packets of seeds for kitchen garden were given to 150 houses in two villages where Baalwadis were set up. These had about six types of seeds like bitter gourd, lady finger, bottle gourd, green beans, pumpkin and cucumber.

Families with malnourished children and pregnant and lactating women were given priority.

Seeds saved in a year were used next year. In 2017, horticulture department gave 500 seed packets. Adding to this bounty were about 100 packets of seeds saved last year. In all, 1,775 families in 15 villages were given seeds.

Satlesh Verma from Khairaha Siyanagar village in Jawa also received vegetable seeds from NGO in 2016. She grew bottle gourd, kunela, green beans, long yard beans, bitter gourd and lady finger in her kitchen garden. She gives excess vegetables to Baalwadi, and, any remaining surplus, she sells in the market. In 2016, she sold vegetables worth Rs. 30,000. Before she started growing her own vegetables, she used to spend Rs 10,000/year on buying them from the market. Money thus saved is now spent on children's education and is kept for future use.

Kitchen garden growing at the spot where waste water is discarded; Woman with dried kitchen garden produce which will be used for seeds

In 2017, 388 households were given 388 packets in 25 villages. Out of these 350 packets were purchased for Rs 10,000 from farmers of Jangela village and rest 38 households were given seeds which were saved from 2016 from Karondi and Jangela villages. Total production this year was 42,680 kilograms of vegetables worth Rs. 3, 41,440. Total production of two years of kitchen garden is 53,680 kilograms worth Rs. 4, 29,440.

Table - 3

Details of kitchen garden usage, production, and value of produce

District	No. of Villages with Kitchen Gardens	No. of Families using kitchen Garden	Types of Vegetables Grown	Total Production (in kg)	Value of Total Produce (In ?)
2016					
Rewa	17	462	9	55,440	4,43,520
Panna	25	500	9	50,000	4,00,000
Satna	12	112	5	13,440	6,04,800
Umaria	2	100	8	11,000	88,000
Total	**56**	**1,174**		**1,29,880**	**15,36,320**
2017					
Rewa	26	1,775	9	2,13,000	17,04,000
Panna	25	759	9	75,900	6,07,200
Satna	24	2,000	14	2,40,000	19,20,000
Umaria	25	388	8	42,680	3,41,440
Total	**100**	**4,922**		**5,71,580**	**45,72,640**
2018					
Rewa	26	2,153	9	2,24,000	18,13,000
Panna	25	1,159	9	1,07,000	9,07,500
Satna	24	2000	14	3,53,440	27,24,800
Umaria	25	565	8	3,28,835	71,19,040
Total	**100**	**5877**		**10,13,275**	**1, 25,64,340**

Table - 4

Total production and cost benefit estimate for kitchen gardens' produce

Districts	Total Production (2016+2017+2018) (in Kgs)	Total Cost Benefit (2016+2017+2018) (in Rs)
Panna	4,92,440	39,60,520
Rewa	2,32,900	19,14,700
Satna	6,06,880	52,49,600
Umaria	3,82,515	75,48,480
Total	**17,14,735**	**1,86,73,300**

Plantations

Under Dastak, villages were also given fruit and forest plants to be planted to ensure availability of fruits. Since the start, 174 trees have been planted in Panna and 2,440 plants in different villages in Majhgawan.

Plants are grown in the area where waste water is discarded

In 2016, in Jawa, 389 small plants were given to 68 houses in four villages - two villages with Baalwadis running and two other nearby ones. These plants were sourced from the state forest department and village panchayat.

In 2017, forest department gave 500 more plants and gram panchayat gave 293 more plants in Jawa. This year, neem and papaya trees were also given. In 2018, forest department has promised to give 400 to 500 more trees in June and July including mahua and bamboo. Besides this, Rs. 20,000 from the project has been given to a nursery for 432 more trees.

In 2016, in Karkeli, Rs 33,000 was spent on a government nursery for purchasing 2,500 plants for distribution in villages. Around 5,416 plants were given by the forest department for free. These included sagwan, mango, jackfruit, lemon, bamboo, guava, amla and mahua. These were distributed in all 25 project vil-

lages. In 2017, the forest department gave 460 plants and 540 plants were sourced from the villages.

In Kohka 47 village, youth committee members brought children in the village together and made seed balls with fruit and vegetable seeds like tomato, lady finger, mango, black plum and bottle gourd.

This is a man-made pollination method where seeds are mixed with soft mud to save them from insects. These are then dried and thrown on a barren land.

Papaya tree in a Dastak project village

Seeds for Farming

Another initiative under Dastak was to make farmers self-reliant with seeds for their crops. Seeds make a large expense of a farming cycle and, every season, farmers have to buy them from the markets.

The region has a rich tradition of coarse grains like kodo and kutki which are high in fibre, are healthier, can grow in harsh weather conditions and require less water, but are becoming extinct. When NGO teams started work in the region, they saw that farmers had reduced production of these grains. And whatever little they were producing, they were selling dirt cheap. For their own consumption, they were buying poor varieties of rice. They were also growing commercially viable crops like wheat and rice, which were heavily dependent on chemicals.

Kodo grain grown with the help of Dastak project

It seemed difficult for the NGOs to reverse this trend, but they had meetings with the farmers and explained the benefits of local foods. Teams asked the farmers to revive local seeds and demonstrated how to switch to organic farming. Farmers were provided inputs on conservation of seeds and also on improvement of soil quality by using indigenous and organic methods.

Initially, in 2016, the NGO teams provided local varieties of seeds like rice, kodo, kutki, corn, til, jowar, moong and urad to farmers. Provisions were made from

Dastak funds. Project information centres, became the centres for collection and storage centres for these seeds. After the first round of crops, some seeds were collected from the farmers and seed banks were established.

Fields sown with the seeds given under Dastak project in Panna

Project districts were facing drought and in a gap of 15 days the districts saw floods. Farmers noticed that hybrid seeds were destroyed in such inclement weather, but local seeds gave a good yield. Even during drought, production happened. That encouraged the farmers to shift to local seeds.

In 2016, in Panna, 53 farmers from two villages were given 221 Kgs. of seeds of til, moong, urad and rice. Cost for buying these seeds was Rs 23,820. But due to heavy rains, total output was only 405 Kgs. Except rice, no other crop could give enough output. After selling the produce to recover input cost, farmers returned the remaining seeds for setting up a seed bank.

In Majhgawan, at the start of Dastak, Kharif seeds worth Rs. 40,000 were given to 250 families. But excessive rains in 2016 destroyed the crops. In 2016, in four villages, 68 families were given seeds for their fields. For the Rabi season, 27 families were given one quintal wheat seeds in two villages. Some of the families received seeds for both Kharif and Rabi seasons.

In 2017, same model was started in Dadhin village also. About 18 quintal wheat was given to 44 families there. Same families were also given six quintals of corn. In all, this year, 11 quintal rice was distributed in six villages among 145 families. In addition to that, families were also given 100 kg moong, 100 kg udad, 50 kg sesame, 50 kg corn, 200 kg jowar and 100 kg kodo. The total cost of these seeds was Rs. 63,000.

Birgadha Village Farmer's Yield is result of using local varieties of seed

Rains in the season were poor, so 195 quintal of Kharif worth Rs 3, 27,000 was produced. Also, 23 families returned 150 kg of rice in the seed bank

and later the same families were eligible to take seeds again from the seed bank.

In all, Dadhin village has seen 175 kg of rice come back to the bank and it now has more seeds than it requires. The excess seeds can now be given to other villages where more seed banks can start.

Keskali and Rampal have a big family of 50 members in Birghada village. They have collective farms of about 12 acre size on which they grow rice and chana. Before they started taking seeds from the seed bank, family was spending at least Rs. 5,000 on buying seeds for just 2.5 acre of land. In a year for two rounds of crop, about seven quintal of seeds are needed. But now as the family saves money on the seeds and is also using seeds which can be reused, it is hopeful it will save enough for next year's seeds.

Another farmer, Ram Lakhan, in the same village has three acre land and grows wheat and jawa (Oats). Earlier, he used to spend Rs. 500 for 20 Kgs. of seeds. In total, he used to sow about 20-30 kg wheat. First time, he took 40 kg seeds and returned 52 kg. His produce was five quintal. The second time he took 52 kg seeds from the bank. He had no water this time for the crops to irrigate his fields, hence his crop was poor. If he could irrigate his fields then he can expect 30 quintals from this crop.

Betu Singh from the same village has four to five bigha land on which he grows arhar, chana and rice. He used to earlier ask people for rice seeds and used cow dung as manure for the fields. From 40 kg wheat taken from NGO, he had production of 4.5 quintal. He had to return 52 kg wheat as a deposit to the seed bank. He then took 52 kg for the next crop. He will now have to return 60 kg.

In 2017, in kharif season, 17 quintal 19 kg seeds of rice, moong, urad, jowar, kodu, sesame and corn were distributed to 78 farmers costing Rs. 62,808. It produced total 125 quintal. These farmers were given seeds in both rabi and kharif seasons.

In Khairaha Siyanagar village, Ram Siromani Kol was one of the 43 farmers who took local seeds from NGO. He has one acre of land on which he has also sown vegetable seeds along with corn, jowar, arhar, sesame, rice and kodo. His family earlier used to eat kodo, which is a locally grown coarse grain. But they have now shifted to eating jowar and wheat, which he grew on his own filed. He gets five to six quintal from his one acre land.

Seed bank was then set up in two villages – Khairaha Siya Nagar and Geduraha. Seed bank was not set up in Ghaduai village. Farmers from Ghaduai village can access seeds from Geduraha village. Total seeds collected in the banks so far are 18.5 quintal. Seed banks also have kitchen garden varieties.

In Jawa, four farmers from Kulhua, Dhurkuj and Khairaha Siya Nagar villages had gone to Jhabua village for training in organic farming organised by VSS. These farmers returned and informed other farmers about these techniques. They are also applying the techniques like using cow dung and cow urine as manure in the fields.

Ram Siromani Kol with his organically grown corn and Kodo

In 2016, in Karkeli, Rs. 5,550 was spent on 185 kg local seeds of corn, arhar, kutki, kodu, urad and rice to be given to 40 farmers in two villages. It was a drought year, so the output was almost 20 quintal worth Rs. 50,400 only. In 2017, seeds for Rs 20,000 were given to 20 farmers in two new villages. 319 kg of rice, ramkila, kodu, corn, kutki and urad seeds were given to be sown in 40 acre land. This produced total 31.5 quintal seeds worth Rs. 1, 23,935.

In Janghela village of Karkeli, because of poor rains, no Rabi crops were sown in 2017. Kharif crops also dried and there was very little production. Despite this, the farmers returned seeds to maintain seed bank in the village. In Karkeli, seed bank is currently running in two villages - Karaundi and Behrolia.

In the four Dastak districts, direct intervention on farming has been done with 412 families covering an area of 646.5 acres.

Traditional organic vessels for storing grains in a seed bank in Umaria

Pits for Organic Manure

A step towards using animal residue as fertilizer to do away with chemical fertilizers is to have pits. Five such pits, called Nadep, in every block were made. Few farmers are experimenting with this manure on a patch of land and are using the regular chemical fertiliser in the remaining field for comparative purposes.

The purpose of this experiment is to reduce input cost of production and to promote use of organic manure.

NADEP in Umariya

Early Childhood Care and Development Centres

Dastak started in the drought and flood ravaged villages where child malnutrition was at its peak. Prior to Baalwadis, villages had only state-run aanganwadis.

Aanganwadis are run by the Ministry of WCD. These centres have to serve hot cooked meals every day to children in 3-6 years age group. To children below the age of three and to pregnant and lactating women, the centre has to give supplementary nutrition in the form of THR packets. All these are provided under ICDS.

In case, if SAM children are not gaining weight by regular meals at aanganwadis, the aanganwadi workers can refer these children to nearest NRC. It is a health facility where SAM children are admitted and managed for medical and nutritional deficiencies.

Besides providing nutrition supplement, aanganwadis are also supposed to provide basic early education to children for their psychological, social and physical development.

Children can be enrolled in schools at the age of six. For children above three, aanganwadis act as crèches. But the state programmes do not have any mechanism to give day care to U-3 children.

Dastak Baalwadis aim to intervene at this level of a child's growth by providing them shelter and care, for the time their parents are out for work. This is planned to be done without being in conflict with the existing state facilities. In fact, it supplements the aanganwadis' functioning by giving a robust foundation to younger children.

At the initial stages of project implementation, it was seen that one of the biggest reasons for children slipping into malnourishment was that they were not looked after when parents were away.

Parents were also unaware about what to feed children for their proper nutrition. Hygiene at homes was poor and because of limited drinking water, children were given unclean water. Water-borne diseases such as diarrhoea and dysentery were common among children.

Women often carry their children with them to the fields where they work

Villages also had poor infrastructure which limited the access of villagers to institutional health care. Without proper roads, ambulance never used to come to villages. Many villages had home deliveries, children were born with low birth weight and immunization rates were poor as ANMs did not visit remote villages.

Many families in villages never used to weigh their children as they had the superstition that their children will fall ill. In some villages, THR given to younger children by aanganwadi worker was never eaten by children. Either adult in the house used to eat it or it was given to cattle. All this had had an adverse impact on children's health.

In all four villages, parents said that they leave their infants at home under the care of elder children. Women walk to the forests and then to the markets to collect and sell firewood and men mostly go out to find labour work either in construction or in agriculture. They return home only by the end of the day.

The parents often leave the younger child in the care of elder children

Mothers used to keep cooked food behind for children which used to get spoilt as animals used to feed on it. The elder children, under whose care the infants were

left, were also in most cases very young to understand the needs of an infant. As a result, infants left behind remained unsupervised, in unhygienic conditions. They could not take food or water themselves and this affected both, the infants' and the elder children's health. Most of the elder children used to drop out of school to provide infant care at home.

Baalwadi workers performing language development activities with children

Under Dastak, it was then decided to open Baalwadis in at least two villages in each district. Preference was given to villages which had no aanganwadi. Villagers welcomed the idea of Baalwadis with regular food, colourful walls, toys, spacious and clean rooms managed by trusted women of the village.

In Panna it was started in Kota Gunjapur and Manas Nagar villages. In Majhgawan, Baalwadi was opened in Birghada and Dadhin villages. In Jawa, it was started at Khairaha Siya Nagar and Garhuwai villages. In Karkeli, the two villages selected were Janghela and Karaundi. But in Karkeli, the NGO wanted to try a different system and they opened Baalwadis in villages which already had running aanganwadis.

Baalwadi worker washing hands of children before lunch

Baalwadis were started with minimum outside intervention. Idea of a Baalwadi is to involve village community in child care and not to depend on any outside agency.

In the beginning, each Baalwadi opened for just 15 needy U-3 children. But in villages where there was no aanganwadi, U-5 children also started visiting regularly. The project had to then expand the scope of Baalwadi and incorporate U-5 children also.

Baalwadis follow a schedule where the day starts with welcoming children from 9 AM onwards. Their hands are cleaned and they are given food and water. Children then offer prayers and play games. By afternoon they are given lunch after which they sleep. They are fed again when they wake up and their hands, faces and feet are washed again.

Under Dastak, foods given include locally consumed vegetables, pulses, roti, rice, puri, sweet chikki made with peanuts and jaggery and ladoos made of rich seeds. Arrangements have been made for eggs, which are supplied by NGOs, to be given to every child at least twice a week in winters.

Ladoos made of seeds, nuts and other locally available health foods are given to children at the Baalwadis

Since a Baalwadi has been started as an initiative which can be carried forward by the villagers themselves, hence they contribute mostly with food items. For instance, some households give wheat, rice or few vegetables which they have in excess. Record of who is contributing what is now being maintained at Baalwadis.

Registers are maintained at each Baalwadi where children's monthly growth is monitored. Their MUAC, age, weight and height are measured and based on that it is analysed how many children are malnourished and how their health is improving.

Baalwadi workers also meet with parents three times a month to update them on how their child is growing. In case, a child is ill, then the family is alerted immediately. This helps the families address any signs of illness in children at the earliest.

A form of treatment adapted at the Baalwadis for malnourished children was

Mahamash oil massage. Massage with this ayurvedic oil stimulates blood circulation which increases the supply of oxygen and nutrients to the body. This medicinal oil is known to have cure for neurological conditions. It contains black gram (also called masha), which is the main ingredient of this oil. Other ingredients include bilva, agnimantha, shyonaka, gambhari, patala, shalaparni, prinshnaparni, gokshura, rihati, kantakari (also called dashamoola) and water.


Mahamash Oil Massage (AYUSH Therapy)

This oil massage is combined with supushtikarak kheer. This kheer, prepared with milk, supushtikarak churan and sugar, cures cough and throat swelling. It is also beneficial in vomiting, blood disorders, digestive and respiratory problems and helps improve the immune system. Supushtikarak churan is prepared by mixing four ayurvedic medicines – ashwagandha, shatawari, sonth and mulethi. Ashwagandha increases blood production and helps in preventing anaemia. Shatawari helps in gaining strength. Sonth helps in removing toxic substances from the body and is good for controlling diarrhoea. Mulethi is beneficial for stomach disorders.

Combination of oil massage and kheer was well received by villagers as they could treat the child at home itself. Sessions were organised for Baalwadi women in December 2016 to train them on how to use the oil and kheer. With this combined therapy of 21 days, 430 children from 65 project villages were treated from January to March 2017. After completing the therapy, children gained between 100 to 700 grams.

Baalwadis also started celebrating 'Vyanjan Diwas' once every two to three months. In this, women were asked to prepare one local dish which is rich in nutrition and bring it to show it to other villagers. This way, the villagers exchange ideas on how to prepare and promote local nutritious foods, which were getting extinct.


"Vyanjan Diwas"- Nutritional dishes made by local food resources

In cases, when Baalwadi workers felt that malnourished children need medical care, they were taken to nearest NRC. In the first phase of the project (January-March, 2017), 430 SAM children were taken to these centres. Before Dastak, families used to be reluctant in taking their children to NRCs. Many complained of no resources to travel, and bad behaviour by staff there or lack of awareness about such centres as the reasons.

Another big advantage of Baalwadis is that it has helped retain children in schools. Elder siblings who used to be left behind in the house to take care of younger siblings can now continue their school education. School retention figures have gone up since Baalwadis have opened.

PANNA

Kota Gunjapur Village Baalwadi


Food being served to children at the Baalwadi

Village has 76 households with total population of 356; all tribal, except one OBC. Village has one mini-aanganwadi allotted, but it functions without a building.

Baalwadi started here in June 2016 in care of Indira Kumari and Roopkali. They told that prior to Baalwadi children also used to migrate to cities with their families. At least 50% of families of the village used to migrate as there was a serious water crisis. On return, most of these children were found to be weak.


Baalwadi workers performing developing activities with children

Baalwadi here started by registering 48 children aged between six months to five years. Out of these 24 children were normal, seven were MAMs. One child who has improved on account of opening of Baalwadi is Sanskar. When Baalwadi opened, he weighed only six kilos. Aanganwadi worker asked his mother to take him to NRC. He was admitted there for 15 days and was given food and medicines. It was found there that Sanskar also had TB. He was put on

medication and gradually his weight increased to eight kilos. He is now 14 months old and is in a good shape.

Another boy Sandeep was an SAM when Baalwadi started. He used to eat little food, had constant diarrhoea and was very weak. He is now regular at Baalwadi and is no more an SAM.

As on December 2017, the Baalwadi had 43 children registered, with 27 children with normal growth statistics, and five as MAMs. Since Baalwadi keeps younger children in its care, the older children have started attending schools; school dropout rate is lower now.

Table - 5

Nutritional status of children registered with Kota Gunjapur village Baalwadi

No. of registered children (6 months-5 years)	No. of children whose growth is monitored	Normal	% of normal children out of registered children	Medium	% of MAM children	SAMs	% of SAMs
June 2016							
48	31	24	77.4	7	22.5	0	0
December 2017							
43	32	27	84.3	5	15.6	0	0
December 2018							
46	46	44	95.6	2	4.3	0	0

Table - 6

Percentage change in the number of malnourished children registered after 18 months and 30 months from the beginning in Kota Gunjapur village Baalwadi.

Months	% change in children in normal category	% change in children in MAM category	% change in children in SAM category
18 Months	6.9	6.9	-
30 Months	18.2	18.2	-

Manas Nagar Village Baalwadi

Village has 55 households with 269 people; all daily wage labourers. No household in village owns agricultural land. Aanganwadi for this village is five kilometres away so no children go there. Hence aanganwadi worker visits village once a month to give THR for children and pregnant women.

Baalwadi worker measuring MUAC of a child

Baalwadi in this village was started in June 2016. It is run by Lakshmi Dahayat and helper Sumitra Ragwar. In 2015, they received training to run a child care centre and they started it with 30 children between six months to five years. Out of these, five were in normal growth range, 13 children were MAMs and 12 SAMs.

Lakshmi says that back in 2016, children used to be very thin, they suffered muscle wasting and most of them used to suffer from constant diarrhoea and vomiting. Children used to cry all the time and were iritable. Before Baalwadi was opened, aanganwadi worker used to take 13 to 14 children in a year to the NRC.

Love Kush with his mother

Now with a functional Baalwadi, as on December 2017, village registered 36 children. Out of these 19 were normal, nine were MAMs and three SAMs.

Children here are made to play different games which enhance their sense of smell, touch, speech. In winters, children are also massaged with Mahamash oil which makes their bones stronger and improves their blood circulation.

In April 2016, village applied for an aanganwadi. It opened after one year with Asma Begum as worker and Suman Raja as her helper. For first month-and-a-half, food at the centre was provided by one woman in the

village through her own funds. Utensils, chairs, toys, water cooler et al were also donated by her. Government is paying monthly rent of Rs. 200 for the centre and the remaining amount of Rs. 300 is also provided by the donor.

As of February 2018 aanganwadi records, there were four malnourished children in the village. These were - Love Kush (mother – Somvati), Ashish, Ragini (1 year 8 months) and Pushpa (1 year 3 months).

Table - 7

Nutritional status of children registered at Manas Nagar village Baalwadi

No. of registered children (6 months-5 years old)	No. of children whose growth is monitored	Normal	% of normal children out of registered children	MAMs	% of MAM children	SAM	% of SAM Children
June 2016							
30	30	5	16.6	13	43.3	12	40
December 2017							
36	31	19	61.2	9	29	3	9.6
December 2018							
42	42	33	78.5	7	16.6	2	4.7

Table - 8

Percentage change after 18 months and 30 months from the beginning, the number of malnourished children registered with Manas Nagar village Baalwadi

Months	% change in normal children	% change in MAM children	% change in SAM children
18 Months	44.6	14.3	30.4
30 Months	61.9	26.7	35.3

SATNA (Majhgawan)

Majhgawan

Out of the selected 24 villages, only 20 had aanganwadis; two out of these are mini aanganwadis, with limited space and resources.

In four villages which had no aanganwadi, two villages - Birghada and Dadhin - were selected for Baalwadis. Wherever people were receptive to idea of Baalwadi, they were opened.

Baalwadi workers making children exercise

Birghada Village Baalwadi

All 180 households in Birghada village are tribal. Government-run aanganwadi for this village is three to four kilometres away and children from this village do not go there.

Here Baalwadi was started on June 24, 2016 with 22 children between six months to five years registered. Out of these, only two children had normal growth statistics, nine were MAMs and 11 SAMs.

Building for the Baalwadi has been given by a villager on rent. Caretaker and the helper of Baalwadi are women from the village itself: Lakshmi Singh, Savita Singh.

A parent dropping his child to the Baalwadi

A few children have become model children under Dastak and are also a source of motivation for the villagers. Their stories of recovery encourage the villagers to continue and strengthen the Baalwadi.

One such child is four-year-old Ritu who had to be taken to NRC twice before Baalwadi opened in village. In 2014, when she was a year old, she constantly had diarrhoea. She could not digest any food and was not putting on weight. A year later, ASHA of the village took Ritu and her mother to NRC where Ritu was treated for 15 days.

When she turned three years old, she had to be taken to NRC again as she slipped into SAM category. Soon after she returned the second time, Baalwadi was opened which Ritu has been regularly visiting since. Ritu's mother has seen a drastic change in her since. "She doesn't get tired of playing or walking around now," says Ritu's mother.

Baalwadi helper feeding Kaushalya

Another child, two-year-old Mamta, used to be constantly ill as soon as she crossed six months of age. She used to get fever and diarrhoea repeatedly. She was only six months old when her mother, Meena Bai, conceived again. With opening of Baalwadi, Mamta has been a regular. As a result of eating small portions at regular intervals, her digestion has improved and her appetite has also increased.

To ensure children get proper food at home also, Baalwadi workers encourage households to grow vegetables in their home compounds with special emphasis on families of malnourished children.

As on December 2017, 19 children were registered at Baalwadi, out of which seven were normal, eight children were MAMs and four SAMs.

Table - 9

Nutritional status of children registered at Birghada village Baalwadi

No. of registered children (6 months-5 years old)	No. of children whose growth was monitored	Normal	% of normal Children	MAM	% of MAM Children	SAM	% of SAM Children
June 2016							
22	22	2	9	9	40.9	11	50
December 2017							
19	19	7	36.8	8	42	4	21
December 2018							
18	18	10	55.5	5	27.7	3	16.6

Table - 10

Percentage change after 18 months and 30 months from the beginning, the number of malnourished children registered with Birghada village Baalwadi

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Months	27.8	1.2	29
30 Months	46.5	13.2	33.4

Dadhin Village Baalwadi

Dadhin has about 40 households, all tribal. Nearest aanganwadi for this village is 1.5 Km. away in Patni village. When idea of a Baalwadi for children of the village was floated, families welcomed it and said that they will contribute food for kitchen. Anjana Mawasi and Uma Mawasi were selected by villagers as Baalwadi worker and helper.

Baalwadi was opened a year later in June 2017. As on June 2017, 38 children were registered with this Baalwadi. Out of these, five children were normal, 24 children were MAMs and nine SAMs.

Some families initially resisted sending their children to Baalwadi. Mothers used to complain that their children were falling ill after eating Baalwadi food. “The

kind of food which the children are given in Baalwadi is cooked in homes on festivals," Anjana said, referring to vegetables, pulses, puris and sweets.

As children started eating rich food in Baalwadi on a daily basis, their bodies took time to adjust to that diet, she explained. "The regular diet at home was salt and roti," she said. Anjana explained to the parents that children will slowly get used to eating this food, which is needed for their physical and mental growth. Her persistence made the parents agree to send their children to Baalwadi.


Meena and her mother Mantu at the Baalwadi Centre village Dadin

When children started coming to Baalwadi, they were so weak that they would neither play nor speak. They used to just sit in a corner and cry. They were too tired to even move. Four children even had to be sent to NRC. Before opening of Baalwadi, children were routinely being sent to NRC.

Change in children's health is visible. They are now much more active and receptive to calls. They play with other children, sing songs and even ask for more food, indicating that their appetite is improving.

As on December 2017, 39 children were registered with Baalwadi. 19 children were normal, 16 were MAMs and four SAMs.

Baalwadis are a big relief to the families with younger children. Parents can now leave their children behind in the care of reliable women of their own village. Villagers now want a bigger Baalwadi, for which one family in the village has donated its land.


New Baalwadi being constructed on the land

Leelawati has over one bigha land in the village which is lying unused as her

family has shifted to a house in the fields. On this, new building for Baalwadi is being constructed. Leelawati's grandchildren also come to Baalwadi. Villagers are pooling in their labour and are constructing the building. Work for this started in October and it will be complete by March-April.

Table - 11

Nutritional status of children at Dadhin village Baalwadi

No. of registered children (6 months-5 years)	No. of children whose growth was monitored	Normal	% of normal Children	MAM	% of MAM Children	SAM	% of SAM Children
June 2017							
38	38	5	13.1	24	63.1	9	23.6
December 2017							
39	39	19	48.7	16	41	4	10.2
December 2018							
43	43	22	51	16	37	5	11.6

Table - 12

Percentage change after 6 months and 18 months from the beginning, the number of malnourished children registered with Dadhin village Baalwadi

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
6 Months	36.6	22.1	13.4
18 Months	37.9	26.1	12

Before the balwadi started in Dadhin, it was operating in Kaimha village.

The change in the nutritional status of children in this village between June 2016 and December 2016 is as follows :

Baalwadi Center kitchen

Table - 13

Nutritional status of children registered at Kaimha village balwadi (now closed)

No. of registered children (6 months-5 years old)	No. of children whose growth monitored	Normal	% of normal children out of registered Children	Medium	% or medium children out of registered children	Severe	% of severe children out of registered children
June 2016							
32	30	1	3.3	28	93.3	1	3.3
December 2016							
34	32	1	3.1	31	96.8	0	0

Table - 14

Percentage change after 18 months in the number of malnourished children registered with Kaimha village balwadi (now closed)

% change in children in normal category	% change in children in medium category	% change in children in severe category
(0.2)	(3.5)	(3.3)

In six months, the Kaimha balwadi saw small decreases in all normal, medium and severe categories. In the normal category, the figure dropped by 0.2%, in the medium category it dropped by 3.5% and in the severe category it dropped by 3.3%.

REWA (Jawa)

Khaihraha Siya Nagar Village Baalwadi

Baalwadi in Khairaha Siya Nagar village stared in April 2016.

In 2015, when NGO teams were contemplating setting up a Baalwadi in this village, they had meetings with women about their expectations from a day care centre for children. At first, NGO teams called women to Baalwadi just to see what it is and how it will function. Mothers were explained how their children will be taken care of and what all they would be fed.

Baalwadi here started with 30 registered children. Out of these 26 were normal, three were MAM and one child SAM. It is run by Nirmala Adiwasi and her helper Rakhi Verma. Initially, Baalwadi had provision for U-3 children only, but eventually it was extended to U-5 children also.

When people saw a functional Baalwadi, they started sending children there. At Baalwadi, women took extra care of malnourished children. They are fed extra food, like green vegetables. If children are absent, then helper takes food to their homes so that their mothers can feed them.

A change in attitude of women of the village is also visible. Some women come regularly for any help at the Baalwadi as they feel a sense of ownership. Women also actively participate in Vyanjan Diwas which is celebrated once a month.

Children have a rich menu of poha, sooji, daliya, milk, chhola poori, dal, papad, seasonal and green vegetables, and fruits like apple, mango and pomegranate. Eggs are also given to children, but only in winters. Villagers have also been regularly contributing with vegetables and other food items for Baalwadi.

In absence of an aanganwadi, immunization in village was poor. As Baalwadi has been set up now, ANM has also started visiting for regular immunization. Regular medical check-ups are done for children and health supervisors also visit and inspect the nutrition status of children.

By August 2017, village had eliminated child malnourishment. As on December 2017, Baalwadi has had 39 children registered, all in the normal category.

Table - 15

Nutritional status of children at Khairaha Siya Nagar village Baalwadi

No. of registered children (6 months-5 years old)	No. of children whose growth was monitored	Normal	% of normal Children	MAM	% of MAM Children	SAM	% of SAM Children
June 2016							
30	30	26	86.6	3	10	1	3.3
December 2017							
39	39	39	100	0	0	0	0
December 2018							
22	22	22	100	0	0	0	0

Table - 16

Percentage change after 18 months and in the number of malnourished children registered with Khairaha Siya Nagar village Baalwadi

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Months	13.4	10	3.3
30 Months	13.4	10	3.3

Gadhuai Village Baalwadi

The second Baalwadi in this block was opened here under the supervision of Anisha Adivasi and her helper Mamta Verma. Village has no aanganwadi. Baalwadi started in the village in June 2016 with 27 children registered. Out of these, 22 were normal; three were MAMs and two SAMs.

Kaushal adivasi who has given his land for Baalwadi

At Baalwadi, Anisha and Mamta also meet pregnant and lactating women three times a month and inform them about

health and nutrition. Peop was twice a month to revive old traditional foods.le have started including vegetables in the diet and families celebrate Vyanjan Di

Lines drawn on the ground outside Baalwadi for games for children

Baalwadi was set up on community land of the village. It was built by villagers with the help of NGO teams. DPO gave swings for Baalwadi, which will be set up soon. CDPO, supervisors and aanganwadi workers from nearby villages also visited Baalwadi. As Baalwadi is functional now, ANM has also started visiting the village.

Kaushal Adivasi had three acre land in the village. Out of this he donated 1.5 acre land for constructing Baalwadi. He also pitched in construction and says that he wants children to come here and learn.

As on Dec. 2017, 26 children were registered - 21 were normal, five were MAMs and no SAMs.

Table - 17

Nutritional status of children registered at Garhuwai village Baalwadi

No. of registered children (6 months-5 years)	No. of children whose growth was monitored	Normal	% of normal Children	MAM	% of MAM Children	SAM	% of SAM Children
June 2016							
27	27	22	81.4	3	11.1	2	7.4
December 2017							
26	26	21	80.7	5	19.2	0	0
December 2018							
25	25	22	88	3	12	0	0

Table - 18

Percentage change after 18 and 30 months in the number of malnourished children registered with Garhuwai village Baalwadi

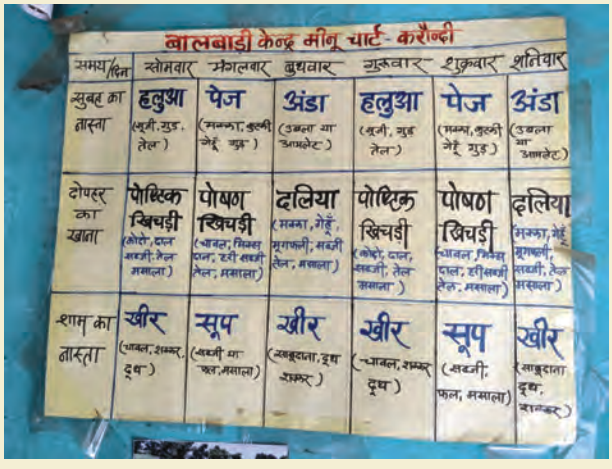
Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Months	0.7	8.1	7.4
30 Months	6.6	0.9	7.4

UMRIA (Karkeli)

In Karkeli, Baalwadis were set up in villages which already had aanganwadi. A direct impact of it was that the services in aanganwadi improved drastically. People became more aware of their rights and started demanding quality services from aanganwadis. Aanganwadi workers also saw how Baalwadis were functioning and, in a way, they saw them as their competitors. Overall result was better services for all village children.

Karaundi Village Baalwadi

Before Baalwadi stared here, village had very high malnutrition. At the time of starting Baalwadi, eight children were SAM. Villagers selected Bobby Singh, as the worker and Shiv Kumari as her helper. It took some time for them to convince women to send their children to Baalwadi. Earlier, children used to run back home. Eventually, they started staying back and the workers also counselled women on what to feed their children and how they are taken care of at Baalwadi.



Baalwadi food menu

At Baalwadi, children get daliya, dal, rice, vegetables, kodu, kutki, kutki ka pej, mooga leaves, koilar veges and pathar chata among other healthy foods. Once children come in, workers make them jump, read, play. Activities are designed in such a way that children learn how to match, balance and synchronise various games and toys. Children are told stories and poems, their hands and feet are washed and they are fed at regular intervals.

Table - 19

Nutritional status of children registered at Karaundi village Baalwadi

No. of registered children (6 months-5 years old)	No. of children whose growth was monitored	Normal	% of normal Children	Medium	% of MAM Children	Severe	% of SAM Children
June 2016							
22	22	1	4.5	13	59	8	36.3
December 2017							
18	18	8	44.4	9	50	1	5.5
December 2018							
16	16	13	81.25	3	18.75	0	0

Table - 20

Percentage change after 18 and 30 months in the number of malnourished children registered with Karaundi village Baalwadi

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Month	39.9	9	30.8
30 Month	76.75	40.25	36.3

Jangela Village Baalwadi

Despite an aanganwadi, children were malnourished. Aanganwadi here was not very active and children were irregular. With the help of NGO, Baalwadi was started in 2016.

Baalwadi women also work in sync with aanganwadi worker. Because of their coordination and more vigilance by villagers, services at aanganwadi in village have improved and it has now become an ideal aanganwadi.

Attendance of children at Baalwadi and

aanganwadi is better now. At Baalwadi, children are made to walk in a straight line, and then on a twisted line. This is to teach them balance. They play games like joining the blocks and identifying colours.

Table - 21

Nutritional status of children registered at Janghela village Baalwadi

No. of registered children (6 months-5 years)	No. of children whose growth was monitored	Normal	% of normal Children	Medium	% of MAM Children	SAMs	% of SAM Children
June 2016							
28	24	3	12.5	17	70.8	4	16.6
December 2017							
26	26	13	50	13	50	0	0
December 2018							
19	19	10	52.6	8	42.1	1	5.2

Table - 22

Percentage change after 18 months in the number of malnourished children registered with Jangela village Baalwadi

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Month	37.5	20.8	0
30 Month	40.1	28.7	11.4

Overall Impact of Eccd Centres

In four selected districts, Dastak started in June 2016 by targeting total 239 children of age between 6 months to 5 years. Out of these, 216 children were monitored for growth. It was found that 38.8% children were in normal category, 43% were MAM children and 18% SAMs.

After 18 months of project interventions, it was found that children in normal category increased to 66.5%, MAM Children dropped to 28.2% and SAMs dropped to 5.2% while in 30 months normal category increased to 76.1%, MAM Children dropped to 19% and SAMs dropped to 4.7%

Overall, there was an increase of 37.3% in normal category, a decrease of 24% in medium category and a drop of 13.3% in severe category.

Table - 23

Nutritional status of children registered with Dastak Baalwadis

No. of registered children (6 months-5 years)	No. of children whose growth was monitored	Normal	% of normal Children	Medium	% of Medium Children	SAM	% of SAM Children
June 2016							
239	216	84	38.8	93	43	39	18
December 2017							
246	230	153	66.5	65	28.2	12	5.2
December 2018							
231	231	176	76.1	44	19	11	4.7

Table - 24

Percentage change after 18 and 30 months in the number of malnourished children registered with Dastak Baalwadis

Months	% change in children in normal category	% change in children in medium category	% change in children in severe category
18 Month	27.7	14.8	12.8
30 Month	37.3	24	13.3

Sports

Playing is seen as a tool where caste, gender and religious barriers are broken and children and youth from all categories come together to facilitate more social, moral and emotional development.

Keeping this in mind, sports was encouraged and youth and children's committees were given sports kits under the project. These kits include cricket bats, wickets, balls, badminton kit and net, skipping rope, basketball and football. Local sports like kabadddi, atha chia, gilli danda, khipdi gadda, kho kho and gapni are also encouraged. NGOs also encouraged community including youths and children to make demand for playgrounds in gramsabhas and schools.

In Panna, 17 new sports fields were made and sports kits were handed to youth in 25 villages. In Manas Nagar village, three acre land was cleared and levelled for playing. A boundary wall was made around it with the help of panchayat. In Majhgawan, playing fields in 16 villages were cleared and levelled.

In Jawa, all 26 villages were given sports kits. Children and youth committee members were made responsible to ensure that all children played and in case the equipment is damaged and needs repair, then they should contribute one rupee each for its repair. In the block, 12 playgrounds were levelled by the community. One out of these is a playground in a school. Some villages even organized tournaments and people come from far away villages to participate and watch.

Road going to Ovari village in Jawa levelled with the help of Dastak project

In Karkeli, each village was given a sports kit. So far two cricket tournaments have been organised wherein 112 children participated.

However, participation of girls in sports is less and restricted to local sports only.

In all, under Dastak, 57 playgrounds have been created, levelled or repaired so far.

Village Committees

Under the project, committees of women, youths and children were made to encourage participatory learning. They were asked to raise and discuss issues affecting them, like functioning of school MDM, running of ICDS programme, MGNREGA, pension and PDS delivery. These locally formed committees now monitor the implementation of schemes.

Scope of the project has expanded depending on the immediate needs of villages. This is where the committees are expected to play a major role. With some initial hand-holding by NGO teams, these empowered committees now meet once a month to discuss the matters concerning the village. They now actively file complaints and applications with the gramsabhas and concerned government departments and do the follow up.

Along with baseline survey, focused group discussions were also held with committees. Committee members raised various issues faced by them. One of the major issues was about the delayed payments and families not getting work under MGNREGA. In Panna, the reason for high level of migration is non-payment of MGNREGA wages. People had not been paid for six months after work and they had given up hopes of receiving their dues. So they have stopped demanding work. One of the ways of retaining people in the villages is to start Dastak interventions and pay them regularly.

NGO team member meeting with children at Bhatwa village, Satna

When NGO teams started working in these villages they ensured that people demanded what their right under MGNREGA Act is. In Panna, with the help of NGO, people started receiving MGREGA money within 20 days of work done. This became a tool to halt migration. In 2017, 4,356 people from 1,386 households got work and wages under MGNREGA in Panna.

In Jawa, with the help of NGOs, people started demanding that work to be done in villages be assigned under MGNREGA. In the project period, 477 people demanded work and all of them got it. Forest department also gave plantation work. All the people who worked also received their payments.

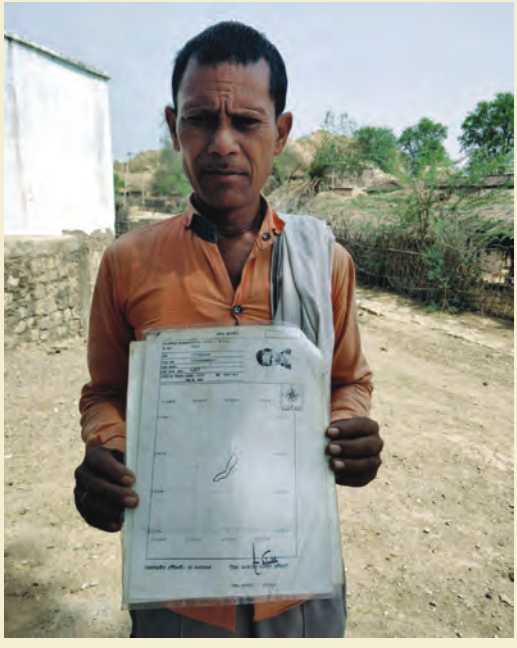
In Karkeli, 243 people had their payments pending under MGNREGA in Kohka village. The money stuck amounted to Rs. 3, 82,000. With the help of NGO, women and youth committee members sat on a protest outside DM's office because of which 173 people received money. In 2016, in a road project under MGNREGA, people were being offered less money than the prevailing wage rate. They protested with the help of NGO and the wages were revised. Since the project started working in the block, 3,011 people have demanded work under the MGNREGA, out of which 2,916 received it. All received wages as well.

In Karkeli, families in Jangela village were not given PDS ration regularly. The ration shop never used to open. NGO teams met the shop owner taking the villagers along, resolved the matter. The shop now opens regularly. In the project period, 878 households were asked to be included in the PDS scheme. Their applications were given to the gram panchayat. NGO team helped in compiling the lists of PDS beneficiaries.

For pensions, in Panna, NGO team helped 203 people receive pensions in 2017. In Majhgawan, 652 old and 48 new pension cases were handled where new cards were made and old pending payment cases got released. In Jawa, about 203 pensions had stopped. With the help of NGO, these were revived. New applications were also filed. In Karkeli, 543 applications for pensions were filed. Out of these, 338 have been processed.

In Karkeli, applications for 845 families to be added in BPL list were given. Out of these, 165 were processed. 173 out of 214 applications for caste certificates were done and for Sabla scheme, four applications were given and two were processed.

The process of filing the applications and moving the concerned departments was started by NGO teams in all districts, but they handed over the responsibility to the youth and women groups later so that the NGOs' help is not needed. The idea is to make them independent and aware of grievance redressal mechanism.



For FRA, in Jawa, 984 applications were filed. Out of these, 324 have received confirmed land rights. For community rights 17 applications were filed for seven villages. In Karkeli, 35 families gave applications to gram panchayat, out of these seven received confirmed papers.

Work in districts was also done to improve the functioning of village schools. Sports are hardly played in schools. At some schools, quality of MDMs is poor and there are caste-based discriminations. Issues like irregularity of teachers and lax attitude towards children dropping out were also seen.

To address these issues, applications and complaints were filed with gram panchayats and other concerned authorities. In Ghooman village of Jawa, a medium school was raised to a high school with the effort of villagers. Applications for starting and improving MDMs in six schools were also put forth. It has already started in five of them.

In Karkeli, 16 children were helped to join schools. A temporary school boundary wall was made in one village by the villagers. In schools covered under the project, NGO team has ensured that there is no violence on children. 12 applications were given for school boundary wall out of which one has been addressed. 20 schools now have a regular sports period.

During FGDs with village committees, access to health care centres was raised as a big issue. During the project period, in all the districts, applications were filed to the concerned departments for regular ambulance service to reach out to villages. In several cases, this was addressed and the ambulance service reaches villages now.

For village infrastructure development, several appeals were made for better roads in villages. Some villages and homes in project area did not have electricity. With the help of NGO, three applications for electricity out of seven in Karkeli have been addressed. In Jawa, electricity was demanded in four villages, out of which three villages have got full connection. In Panna, most of the villages did not have proper roads. This has improved now with the project intervention.

Man from Ovari village in Jawa showing his FRA papers received with the help of Dastak project

In Karkeli, 1,262 applications for PM Awas Yojana were also filed with the gram panchayat. 593 out of these are processed. For toilets, 786 applications were filed under Swachh Bharat Abhiyan. 554 out of these were made. For playgrounds, 22 applications were filed in gram panchayat and 12 were levelled and cleaned.

In each project village, Suchna Sandharbh Kendras (Village Information & Resource Centre) are maintained which give details on village profile, community groups, pattas applied for and also copies of the applications for PDS, pensions etc. These centres also have registers on issuing books, sports equipment and seeds.

To strengthen local governance and to ensure smooth processes for implementation of various government schemes, women and youth committees under the project were expected to engage with these five committees - village health and sanitation committee, school management committee, gram panchayat, MGNREGA committee and forest rights committee. At the time of discussions for baseline survey, it was found that there are hardly any initiatives to discuss matters under these five committees with the villagers. Linkages of women and youth committees with the five committees were found to be uneven.

However, in many villages, village level committees worked in smooth coordination with gram panchayats, ASHAs, aanganwadi workers and ANMs. In

many villages, communication channels with the block and district level officials have also opened and villagers were directly approaching higher offices for quick grievance redressal. In all the districts, some villages were now actively presenting demands in the Gramsabhas for betterment of services in their villages. Many times, these were also incorporated in the village development plans. So far, village development plans have been prepared in 59 villages.

To keep the process of learning active under Dastak, every year leadership and capacity building workshop is organized at district level where two members from each village participate.

Impact on Malnutrition in "Dastak" Villages

As mentioned earlier, Dastak had various interventions to dent malnutrition in 100 villages in four districts of Madhya Pradesh. NGO teams in all 4 districts maintained a regular growth monitoring data of children between six months to five years of age through MIS conducted periodically. Based on data analysis of first MIS conducted in May 2016 and ninth MIS conducted in December 2018, it was seen that of the total children monitored, percentage of SAM children reduced from 15% to 3.2%. There was a drop of 11.8% in the 31-month period.

Similarly, at the beginning of interventions, 40% children were MAM. This figure reduced to 21.8% by December 2018. There was a drop of 18.2% in this category. Children in the normal category increased from 45% in May 2016 to 74.9% in December 2018.

Table - 25

Nutritional status of children monitored in Dastak 100 villages

No. of registered children (6 months-5 years)	Normal	% of normal Children	Medium	% of medium Children	SAM	% of SAM Children
May 2016						
4,863	2,175	44.7	1,967	40.4	721	14.5
December 2018						
4271	3,199	74.9	933	21.8	139	3.2

Table - 26

Percentage change in the number of malnourished children monitored in 100 Dastak villages

% change in children in normal category	% change in children in medium category	% change in children in severe category
30.2	(18.6)	(11.3)