

# 1. Need for the Project

## Background

Anemia, one of the more common blood disorders occurs when the level of haemoglobin in the Red Blood Cells (RBCs) becomes too low. This can lead to health problems because hemoglobin carries oxygen to the body's tissues. Anemia has multiple causes, including inadequate intake of iron and other nutrients, poor absorption of iron, malaria, parasitic worms, infections and genetic disorders. Anemia can cause a variety of complications, including fatigue and stress on body organs. Other common signs of anemia include — irritability, dizziness, rapid heartbeat, lightheadedness, etc. The first symptoms of anemia are manifested through mild skin paleness, decreased pinkness of the lips and nailbeds, yellowing of the whites of the eyes and tongue.

Iron deficiency in women is often exacerbated during pregnancy because of the additional iron requirements of foetal growth. Maternal anemia results in substantial increase in maternal mortality and pre-natal mortality. It is a major threat to motherhood and to the health and survival of the newborn, as it contributes to low birth weight, lowered resistance to

infection, impaired cognitive development and decreased work capacity. For this purpose, the provision of Iron Folic Acid (IFA) tablets to pregnant women to prevent nutritional anemia forms an integral part of the Reproductive and Child Health (RCH) Program. Lactating women because of their requirement of breast feeding, need supplementation to support their body. Girls going through puberty also have a particularly high risk of iron deficiency anemia because of the onset of menstruation; the monthly blood loss increases the amount of iron they need to consume in their diet.

An effective method for preventing/ treating iron deficiency anemia is two fold — a well balanced diet and the intake of IFA supplementation. A well balanced diet should contain sufficient iron in it. Good choices include, grains & cereals, red meat, egg yolk, fish, leafy green vegetables, yellow vegetables and fruits. For vegetarians, an extra effort needs to be made to ensure sufficient iron sources because iron found in meat, poultry and fish is more easily absorbed by the body than iron found in plant based and iron fortified food items. Also, certain food

combinations can inhibit or promote absorption of iron in the body. For example, drinking coffee or tea with a meal can significantly lower the amount of iron absorbed in the body. On the other hand, Vitamin C helps the body absorb

iron. Apart from intake of a balanced diet, medically it is recommended that pregnant women consume 100 tablets of IFA during pregnancy and the adolescent girls take one IFA tablet every week.

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### **Areas of Activity**

Anemia in adults reduces their capacity to do physical work. High prevalence of anemia takes a heavy toll on the health, education and economic status of the people. Gumla district is among the 100 poorest in India, being ranked 513 out of 569 districts in the country on one widely accepted scale of poverty and development. Besides having rich natural resources, Gumla district is predominantly a backward district as compared to other districts of the state as well. Three-fourth of the families in the district live below the poverty line.

Gumla is characterized by a very difficult terrain with extremely poor infrastructure facilities. The district is marred by low literacy and high intake of country made liquor among rural people and various endemic diseases like malaria and

tuberculosis. Naxalite and other extremist activities are also rampant in the district, which inhibit developmental work in the area. All these factors contribute to extreme poverty and malnutrition in the district.

Anemia (hemoglobin level less than 11g/dl) is rampant in Gumla. This is corroborated by the results of the NFHS-II survey, which estimates that 73 percent women of the State are anemic against 52 percent nationally. In the Health Survey conducted in the year 2000 by the Department of Health & Family Welfare, Government of Jharkhand, the proportion of pregnant and lactating women in Gumla who were found to be anemic was even higher at 90 percent. This is an alarming situation. Thus, Gumla was identified by the Government of Jharkhand as a high

priority area for anemia eradication project. Under the project, multiple interventions were taken up to reduce anemia, which include — increasing IFA intake, improved fooding habits, controlling malaria & parasitic worms and decreasing blood loss in women through improved reproductive health.

The project was launched in 5 blocks of Gumla district, covering 424 villages in the process. These blocks were, Bishunpur, Ghaghra, Palkot, Raidih and Sisai. Each of these blocks had different and unique reason to be selected under the study. Bishunpur was selected because of very high tribal population, most of which is primitive type; Ghaghra because of hilly & very difficult terrain; while Palkot for its active & well organized self help groups. Block Raidih was selected because of its very small size and Sisai because of high Muslim population.

Name of the	No. of Gram	No. of Villages
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past. Through its hard work, this organization has earned the trust and confidence of the people of the district. Given this situation, the project could not have got a better partner in the area.

### **Mobilizing Manpower Resources**

In this area, the villages are of small size and they are not a contiguous and regular geographical spread of land. The terrain here is undulating and the habitations (tolas/majras) of a village are scattered far and wide. Majority of the inhabitants in the project area are tribals, some belonging to the primitive types as well. In order to make the project reach all eligible women and girls in the remotest of the habitations, Vikas Bharti identified one local person in each village as the Village Health Worker (VHW) for this project.

In fact, in villages where the tolas/majras were scattered in wide geographical areas, one Village Health Worker (VHW) was identified in each tola/majra. Thus, the project had one local representative in each pocket of the project area. This ensured maximum coverage for the project, as in tribal areas it is easier for a local person to converse and convince the target group than for an outsider.

At the Gram Panchayat level, one Cluster Resource Person (CRP) was posted by Vikas Bharti. He was an important link between the village level VHW and the implementing NGO — Vikas Bharti. For the overall supervision of the project, one Block Coordinator was deputed, who coordinated with all the CRPs in the block and the Medical Officer Incharge (MOIC) and CDPO of ICDS, alongwith the ANMs and AWWs of the block.

To coordinate the field activities of all the 5 project blocks, one Project Coordinator was posted at the Vikas Bharti Headquarters in Bishunpur. A Project Manager was posted at Vikas Bharti, Ranchi, with the responsibility to compile the reports of the CRPs and Block Coordinators and study the reports and minutes of the meetings of the field functionaries

and send the feedback to them, to help them improve their functioning. A monthly activity report of the project was also sent to the State Government for appraisal.

### **Launch of the Project**

The project was launched at Vikas Bharti in Ranchi on 16<sup>th</sup> August 2004 by the Chief Minister of Jharkhand, Mr. Arjun Munda. Other dignitaries who were present at the launch were Dr. Dinesh Kumar Sarangi, Minister for Health, Government of Jharkhand; Mr. P. P. Sharma, Secretary, Health & Family Welfare, Government of Jharkhand; Mr. Jake O Sullivan, Country Program Manager, MOST; Dr. Rajiv Tandon, Country Representative, MOST India; Dr. Manju Shukla, State Coordinator, MOST Jharkhand; Mr. Ashok Bhagat, Secretary, Vikas Bharti. The inaugural function was attended by representatives of the WHO, IMA, local NGOs, faith based organizations, Vikas Bharti Workers, media people, among others.

Next day, on 17<sup>th</sup> August 2004, the project was given a go ahead at Vikas Bharti in block Bishunpur by Dr. Dinesh Sarangi. Mr. Siyaram Prasad Sinha, District Commissioner, Gumla was also present on the occasion alongwith Mr. Jake O

Sullivan, Dr. Rajiv Tandon, Dr. Manju Shukla and Mr. Ashok Bhagat. Other participants in the function were officials from the Health Department and the ICDS Department of Gumla, alongwith Vikas Bharti Workers and local villagers of the district.

### **Training Modules**

Comprehensive training modules were prepared by MOST for each level of trainer-trainee interaction. These training modules were prepared after exhaustive exploratory research work. A series of Focussed Group Discussions (FGDs) were conducted with various stakeholders of the area, such as, ANMs, AWWs, SHG Members, Mahila Mandal Members, Vikas Bharti Workers and adolescent girls, to identify & compile the most appropriate training content, relevant for the project.

This compilation was put to discussion among the participants, which included members of the local NGOs and the Government Functionaries. With inputs from all who mattered, separate training modules were prepared in Hindi for each level of trainer-trainee interaction.

The modules developed for this training, covered in detail the project processes & issues on enhancing awareness & knowledge about anemia and also its causes & the

consequences. A special emphasis was laid on the counseling skills of the trainees. The modules emphasized the need to educate frontline workers on all issues related to anemia and not just focus on consuming IFA, without knowing & believing in the messages of the project themselves.

The module contained all aspects related to anemia — its prevalence, causes, consequences, methods of control, benefits of IFA, healthy fooding habits and the major barriers in reducing anemia among the target group.

The module intended to initially educate & convince the project implementers (ANMs, AWWs, Vikas Bharti Functionaries) on issues related to anemia before they actually started their work. This was done to empower them by giving them an understanding of the rationale for the project. This ensured positive participation by the enlightened and enthused frontline functionaries.

### **Training of Project Personnel**

Training of project personnel was conducted at three levels —

One-day training cum discussion session was conducted for the 6 Super Master Trainers from AMS Consulting Pvt. Limited — a leading training institute. This was organized to acquaint them with the project layout and to familiarize them with the training materials created for imparting training to the project functionaries down the line. Representatives

from CARE and Vikas Bharti also participated, apart from project managers from MOST.

These 6 Super Master Trainers assisted by MOST representatives conducted trainings of 3 batches of 25 Master Trainers each. These trainings were organized at Vikas Bharti, Bishunpur in Gumla. During this 3-day training program, the training module prepared for this level of training was used. From these 75 trainees, 25 Master Trainers were selected.

Now, these 25 Master Trainers were deployed to conduct a series of 3-day trainings of frontline functionaries (Health & ICDS Staff and Vikas Bharti Workers), who would work in the capacity of Grassroot Level Worker under the project. Through these trainings, 1250 frontline functionaries were trained by the Master Trainers.

Location	Duration	Trainer	Trainee
Bishunpur	1 Day	MOST Representatives	6 Super Master Trainers
Bishunpur	3 Day	6 Super Master Trainers	75 Master Trainers
Bishunpur	3 Day	25 Master Trainers	1250 Frontline Functionaries

All the trainings were held by participatory method in a learning environment. The training methods that were used were brainstorming, illustrations with the help of lectures, group work, role-play, case studies, story telling and open house discussions. All trainings were residential trainings and were held in block Bishunpur, Gumla.

### **Role of Community Influencers**

The Gumla Anemia Project revolves around the community and the community has an integral role to play in the success of the project. In each village, the local opinion makers and other prominent people were roped in as volunteers, who formed a Social Support Group (SSG) in the village. These volunteers were the Community Influencers for the project, who could be local religious leaders, self-help group members, mahila

mandal members, youth club members, panchayat members, school teachers and the like.

These SSG members, alongwith the Village Health Worker (VHW) of Vikas Bharti took up the responsibility to identify pregnant women in their village, encouraged them to get ANC and also support them in complying with the IFA regimen. While performing her duty of ensuring cent percent compliance in her village, the Vikas Bharti Worker was mandated to visit at least 4 pregnant women every week to observe and discuss with her any health related issue.

The Village Health Worker conducted a weekly meeting in the village of the Social Support Group members to share the outcome of her visits to these pregnant women. In these meetings, the Vikas Bharti Worker alongwith the SSG members discussed and prepared an action plan as per the requirement of each case in the village. In this plan, responsibility was assigned to the SSG members to convince the lady concerned and estimate the time required to fully convince the pregnant lady/her household members to comply with the IFA regimen.

### **Ensuring Adequate and Timely Availability of IFA**

In each tola/majra, one IFA distribution center was designated under the project. All the

Sub-centers in the project area were the distribution center of IFA. All the Anganwadi Centers were made the distribution center at village level. One Vikas Bharti Worker who was present in each tola/majra, was made responsible to maintain an IFA distribution center for the people in the area.

As part of her duty under the project, the Vikas Bharti Worker was mandated to identify all pregnant women in her tola/majra. This also helped in estimating the requirement of IFA tablets in her area. The Vikas Bharti Worker replenished her IFA stock from the ANM of the area, who in turn got her supplies from the block PHC.

On the basis of requirement of each ANM, the MOIC of the block PHC prepares a consolidated requirement of his block and sends the requisition to the Civil Surgeon, Gumla. Every month, the Civil Surgeon sends the monthly requirement of the district to the State RCH Office at Ranchi. The State RCH Office sends the IFA tablets to the district every 2-3 months, depending upon its availability and sanction at the State level.

### **3. Communication and Social Mobilization**

#### **IEC/BCC Activities**

Varieties of IEC/BCC activities were undertaken by the project. Colourful posters containing messages on the causes of anemia among pregnant/lactating women & adolescent girls and its consequences on their health were prepared. Suggestions on how to prevent anemia and on the remedial measures to take, alongwith the significance of intake of IFA were also conveyed through these posters. These posters were supplied to all the 5 project blocks, to be prominently displayed at all the Sub-centers and the Anganwadi Centers.

A special wall calendar was also developed which the VHWs, AWWs and the ANMs were directed to distribute to all such households where there was a pregnant woman living. This information calendar carried messages, such as, why IFA is important for the health of the women & her unborn child and the adolescent girls; where can one get the IFA tablets; the IFA regimen and the possible side effects of consuming IFA. The benefits of consuming IFA were also highlighted to dispel any false belief. An effort was made to educate the household members of the target beneficiaries on the benefits of intake of IFA.

A two-page brochure was developed for the Village Health Workers. Messages through jingles in local language (nagpuri) on the menace of anemia and the importance of iron and iron containing food items, significance of consuming IFA tablets by pregnant/lactating women and adolescent girls were also prepared. Local artists were hired for singing these jingles in the villages, as part of advocacy for the project.

Local performing artistes were hired to perform road shows (nukkad nataks) in the project villages. In all the 5 project blocks, a ten-member group of performing

artists performed in the villages with the help of a mobile van on a regular basis.

Due to low literacy level in the villages, wall writings were taken up in limited numbers. T-shirts for children with messages on anemia control printed on them were also distributed in the villages.

Apart from these, the Vikas Bharti Workers, Community Influencers, Cluster Resource Persons and the AWWs/ANMs visited the target households in their area and through inter-personal communication, disseminated the project messages with the help of counseling aids to the household members of these women/girls to garner their support in getting favourable response to the project.

### **Role of Project Personnel**

In this community based approach of the project, the basic role of the project personnel at all levels was that of a motivator and facilitator. For rendering uninterrupted flow of services, a multi-level approach was followed in the project. In each project village, a local villager (Village Health Worker) was identified by Vikas Bharti to carry out the project work at the grass-root level.

In villages where the tolas/majras were scattered far and wide, one local person in each tola/majra was identified for the purpose. Wherever there was no AWC/AWW posted in the village, this grass-root worker of Vikas Bharti called the Village Health Worker was made

responsible to maintain an IFA distribution center for the people in the area.

As part of her duty under the project, the Village Health Worker was mandated to identify all pregnant women in her tola/majra. In the households where the Village Health Worker found a pregnant woman, she collected information about the pregnant women and her experiences with IFA supplementation. During her interaction with the women and her family members, the VHW would try to find out whether the women was consuming IFA regularly or not. If not, she tried to probe for the reasons and suggested her and her family members on methods to overcome the hindrances due to which she was not consuming or had discontinued consuming IFA.

The VHW Conducted weekly meetings in her village or tola/majra of the Social Support Group members to discuss the outcomes of her visits to the pregnant women in the previous week. All problems of the women were discussed in these meetings and after thoroughly studying the problems; a plan of action was prepared for each woman. This plan of action clearly stated the problem and the proposed solution to the problem. Specific person(s) were deputed to implement the proposed solution within a stipulated time frame.

In this meeting, a review of all activities and efforts of the VHW and the members of the Social Support Group in the previous week was also done, to share the outcomes of their

efforts and then plan any further course of action in those cases, if any. These meetings were learning/experience sharing and planning processes for the VHWs and the members of the Social Support Group, to provide motivation to the target group & her family and to facilitate enhanced compliance of IFA intake.

At the Gram Panchayat level, the Cluster Resource Person provided supportive supervision to the VHWs and the members of the Social Support Group. Each Cluster Resource Person covered all the villages in his Gram Panchayat Area (around 4-7 villages). The CRP convened fortnightly meetings of all VHWs of his area to review the project activities in the area.

A summary report of all activities during the fortnight was prepared by the CRP, who presented this report in the fortnightly panchayat meetings. The CRP was also mandated to ensure uninterrupted and sufficient supply of IFA tablets in the villages with the help of the ANM of the area.

At the block level, a Block Coordinator of Vikas Bharti was the overall incharge of the project activities in the block. Monthly meetings of all CRPs were convened by the Block Coordinator to review the progress of the project in the block. At the block level, he had the responsibility to liaison with the Block PHC Medical Officer Incharge to ensure regular supply of IFA. At the block level, he was also the nodal person of the project for all project activities and liasioning with the ICDS Department, since the AWW had a key role to play in the implementation of the project.

All the 5 Block Coordinators would send their monthly report to the Project Coordinator at Vikas Bharti, Bishunpur, where all the reports were appended and compiled. The Project Coordinator would send the monthly progress report of the entire project to the MOST/AED State office at Ranchi.

## 4. Exposure of the Target Group to the Project

### **Awareness/Knowledge**

During the discussions with the pregnant and lactating women, we tried to assess their awareness about IFA and its benefits. Women in all the 5 project blocks reported that they knew what IFA tablets were meant for and what were its benefits. They stated that deficiency of blood in the body was called anemia. The benefits of consuming IFA, as enumerated by these women is given below :

◆ IFA keeps away anemia, it is good for anemic women

- ◆ **It is good for the unborn child**
- ◆ **It is food for the unborn child**
- ◆ **It will help to give birth to healthy child**
- ◆ **IFA keeps away weakness. It gives strength to the body**
- ◆ **It cures swelling in the body**
- ◆ **Pregnant women should consume it. It is good for them**

When we asked the adolescent girls about their awareness about IFA and its benefits, they could give the following responses :

- ◆ IFA helps in blood formation
- ◆ It does not allow shortage of blood in the body
- ◆ It is a supplement which takes care of shortage of blood in the body
- ◆ It sharpens memory
- ◆ It gives strength to the body
- ◆ It helps in the physical and mental development of the body
- ◆ Both mother and child will be healthy on consuming IFA

We tried to probe the awareness of the pregnant/lactating women and adolescent girls about the symptoms of anemia in the human body. The symptoms of anemia as stated by them were :

- ◆ **Swelling in the body**
- ◆ **Fatigue**
- ◆ **Yellowing of the entire body**
- ◆ **Feeling of dizziness**
- ◆ **Dark circles under the eye**
- ◆ **Whitening of nail beds and tongue**

◆ **Yellowness in the lower inner part of the eyes**

When we asked these women about the food items which were recommended for their high iron content and the feeding habits, they could tell the names of the following food items and the recommended feeding habits :

Food Items	Feeding Habits
Green Vegetables	◆ Three meals per day should be taken
Fruits	◆ Proper diet should be taken
Meat	◆ Consuming stale food should be avoided
Fish	◆ Keep the kitchen & food items clean & hygienic
Pulses	◆ Pregnant women should avoid strenuous work
Eggs	◆ Should take rest after meals
Milk	◆ Should not take tea immediately after meals
Tomato	◆ Alcohol should be avoided
Salad	◆ Non vegetarian food should be consumed

Specifically, what is done in your household to prevent anemia in your family — to this, the responses were :

- ◆ Now we try to have three types of food items in our meals. First two items were invariably rice and vegetable. As per affordability, we try to accommodate a third item, which often was *chutney* and occasionally pulses.
- ◆ Sometimes we also consume non-vegetarian food, like mutton, chicken.
- ◆ Earlier we used to cook once in the day and eat it in the morning and the night. Now we don't eat stale food. Now, we cook only as much as we can consume at that time.
- ◆ Now we try to eat our meals on time.

- ◆ Now the family members insist on regular consultation with the ANM and the AWW.
- ◆ The family members encourage regular intake of IFA.

### **Visits by Project Functionaries**

One of the more important health functionaries in the rural areas is the ANM. It is important that the ANM visited the pregnant women regularly and counseled them on the benefits of IFA and its significance against anemia. It was reported by the pregnant women of all the 5 project blocks that the ANM visited their village once a month and that these visits of the ANM were very helpful to the women.

However, in block Raidih, all the lactating women said that the ANM never visited them in the last 6 months. In the remaining 4 project blocks, the lactating women said that the ANM of their area was a regular visitor to them and would provide IFA tablets during her visits. The ANM also counseled the lactating women on IFA/anemia.

On the day of the visit of the ANM to the village, the AWW would go to call all the pregnant women to the Anganwadi Center, where the ANM would distribute IFA apart from giving other services. The women said that the ANM told us that consumption of IFA would help in overcoming weakness and that it would do more good to my child than to me. We try to follow the regimen instructed by the ANM and feel better and healthier than before.

Regular visit of the ANM to the village and the support of the AWW is a great motivation for the pregnant women to get their regular check-ups during pregnancy. The Anganwadi Worker has a major role, as she is the regular interface between the women and the project activities. Both

pregnant and the lactating women said that the Anganwadi Worker would remain in regular contact with them on weekly basis to remind them to consume IFA and listen to their health related issues.

The adolescent girls of blocks Ghaghra, Palkot and Sisai reported that the ANM rarely came to meet them during her monthly visits to the village. However, the adolescent girls of blocks Bishunpur and Raidih said that the ANM visited them and distributed IFA. In all the 5 project blocks except Ghaghra, the AWW was a regular visitor to the adolescent girls. During her visits, the AWW would tell them various benefit of consuming IFA, like they would not get exhausted quickly, it would clear the blood in the body and it would not allow shortage of blood in the body.

It was the opinion of the pregnant women that the visits/meetings with the ANM and the AWW, as always were the greatest motivation for them. They said that even before this project, the ANM and the AWW would provide counseling & medicine and take care of them and that the women had tremendous faith on the ANM and the AWW.

In block Sisai, the pregnant women said that the VHW regularly visited and encouraged them to regularly consume IFA. She even counted the number of tablets in the IFA strip to verify consumption. The VHW here also participated in the village meetings and told everybody about the benefits of IFA. During discussion with the lactating women of the project blocks, except in Raidih, in all the project blocks, we were told that the VHW regularly visited them during the last 6 months and encouraged them to consume IFA.

From the discussions with the adolescent girls, it emerged that the VHW regularly met them and

encouraged them to consume IFA. The girls said that earlier we would not consume IFA as we were not aware what anemia was and what needed to be done as a remedy for it. Now we know what anemia was and how important IFA is to treat/avoid it. Now we have started to consume IFA. The VHW told us that it would help us in the physical and mental development of the body.

In the later part of the project, the level of involvement of the VHWs was observed to be quite less. In blocks Bishunpur and Ghaghra, the pregnant women said that although the VHW lived in the same village and happened to meet them often, she rarely talked about IFA/anemia with them. Similar situation was found in blocks Palkot and Raidih also.

Regarding the Community Influencers, except for Raidih block, in all the project blocks, the pregnant women and the lactating women reported that no village advocate, opinion maker of the village came to meet them in the last six months to discuss with them about IFA/anemia.

The pregnant women said that their household members needed to be educated about the menace of anemia and the importance of regular intake of IFA tablets and healthy fooding/living habits. This aspect of the project was weak and should have been taken care of by organizing regular village meetings on the issue.

The adolescent girls said that there were still some adolescent girls who were not consuming IFA or have discontinued consuming IFA. In order to motivate them, regular

meetings should be organized in the village and these meeting should be addressed by the ANM and sometimes by a doctor. The presence of the ANM and the doctor in the meetings would have a lasting impression on the girls.

### Exposure to IEC Activities

In villages where the ANM makes regular visits and the AWW shoulders her responsibility and furnishes them dutifully, a new project/intervention in their area is not very different for them as these projects/interventions usually reinforces one or the other aspect of their routine activity. While focusing on a particular issue more, the ANM/AWW impresses the significance of a particular intervention during the project period. The validation and endorsement to their extra effort on the project/intervention is provided by the IEC activities designed specifically for the project/intervention.

Under this project, variety of IEC activities were undertaken to create awareness about IFA/anemia among women and adolescent girls. We tried to probe the exposure to IEC activities and recall of the messages by the women of these 5 project blocks. The IEC activities and their related references as given by these women is presented on the next page :

IEC Material/Activity	Womens' Recall of the Messages
Nukkad Natak	<ul style="list-style-type: none"> <li>◆ We should consume IFA. It depicted that the women who consumed IFA gave birth to a healthy child, while the one who did not consume IFA gave birth to a weak child.</li> <li>◆ It was enacted that a person is suffering from weakness. A nurse comes and gives IFA tablets to him to consume it regularly. This person consumes IFA regularly and gets healthy and strong.</li> <li>◆ IFA helps in blood formation in the body.</li> </ul>

Flip Book	<ul style="list-style-type: none"> <li>◆ Green vegetables, eggs, chicken, fish, pulses, fruits are shown on a plate.</li> <li>◆ A woman is shown consuming IFA tablets.</li> <li>◆ Pregnant women should consume 100 IFA tablets after 3 months of pregnancy.</li> </ul>
Calendar	<ul style="list-style-type: none"> <li>◆ IFA tablets are available free at AWC.</li> <li>◆ IFA takes care of the shortage of blood in the body.</li> <li>◆ IFA is food for the unborn child.</li> <li>◆ If the mother would not consume IFA, then the child in the womb would be hungry.</li> </ul>
Pamphlet	<ul style="list-style-type: none"> <li>◆ Picture of a sitting women and IFA tablets are shown.</li> </ul>
Poster	<ul style="list-style-type: none"> <li>◆ It was written that pregnant women should consume 100 IFA tablets and adolescent girls should consume 52 tablets in a year.</li> <li>◆ IFA improves your memory. It helps you to learn faster.</li> </ul>
Radio	<ul style="list-style-type: none"> <li>◆ IFA tablets should be taken after meals.</li> </ul>
Wall Writing	<ul style="list-style-type: none"> <li>◆ Pregnant women should consume IFA tablets.</li> <li>◆ Consume IFA and drive away anemia.</li> <li>◆ IFA helps formation of blood in the body.</li> </ul>

Nukkad natak had a tremendous response from the women as well as the adolescent girls. The play depicted in the nukkad natak were not only easy to comprehend but were viewed by all members of the family which lead to awareness and discussion on the play even long after it was played.

Moreover, the illiterate women were not able to get the message meant for them through

the written matters on posters/banners/pamphlets. This was the reason, why jingles in local language that was used as one of the propagation methods for the messages of the project was well received and well remembered by the village people.

Pictorial depictions on the calendars and the flipbook were fairly easy to comprehend and were effective methods of communication but only when someone explained them. The women and the adolescent girls said that the ANM/AWW used the calendars and the flipbooks showing pregnant woman, nurse, food items, a school going girl consuming IFA, as a counseling aid, to explain the importance of consumption of iron for healthy living.

The women reported that earlier also they used to get IFA tablets from the AWC. They said that then they were afraid to consume IFA and used to throw away the tablets when the AWW would give them and would rarely consume it. Now, with enhanced awareness, this does not happen any more. They consume IFA and if they have any side effect, they consult the ANM/AWW of their area.

The pregnant women said that now they have not only understood the significance of IFA but also have themselves experienced the benefits of consuming it. Their greatest motivating factor for consuming IFA was the message that it was the food of the unborn child and for the sake of this unborn child they consumed IFA.

### **Village Meetings**

Meetings in the villages are organized for various purposes — somewhere on weekly basis and at some places on monthly basis. In most of the places, these meetings were attended by the AWW and sometimes also by the ANM and the VHW. In these meetings,

the participants were counseled on IFA and its importance for pregnant/lactating women and adolescent girls.

In blocks Bishunpur and Sisai, weekly meetings were held in the village and in these meetings, all adolescent girls were given IFA to consume in the presence of everybody to make IFA popular and to ensure that it is consumed. This is a novel method to remind the women as well, to regularly consume IFA themselves. In block Palkot, it was reported that meetings of the *mahila mandal* were organized on a weekly basis in which girls were given IFA to consume in the presence of all.

The Community Influencers also attended the village meetings. Since they were respected people of the village and the people of the village followed their advice sincerely, their involvement in the meetings in which the project was discussed had a very positive impact on the villagers. The pregnant women said that earlier also village meetings were organized, but health issues were never discussed.

The adolescent girls appreciated the significance of these meetings in increasing awareness among people about IFA/anemia. They said that the meetings were important to dispel wrong notions of the people about IFA.

However, sans block Palkot, the adolescent girls were found not involved in the village meetings. The adolescent girls in all the project blocks expressed that they should also be called in the village

meetings and the benefits of IFA should be discussed and explained to all.

### **Availability of IFA**

All pregnant women said that they got 30 IFA tablets three times, while some reported that they got 30 tablets twice and some 30 tablets just once. Some lactating women said that they got 50 IFA tablets two times. All the women complained that now when we have been made aware of the benefits of IFA and we demand it, we do not get sufficient supply.

The women said that when there is a gap of some days, we feel that now what is the use of consuming it, as it would not work because of break in continuity.

Among adolescent girls, it was found that except in some areas of block Ghaghra, in all the project blocks the adolescent girls received 50 tablets each. The adolescent girls of Ghaghra reported that they did not receive IFA tablets in sufficient quantities.

### **Consumption of IFA**

All women reported that they consumed IFA quite regularly. When asked for the changes that they observe in themselves after consuming IFA, the women shared their experiences with us, which are presented below :

- ◆ We do the household chores comfortably without fatigue
- ◆ Earlier I would feel dizzy on doing strenuous work but now all that has disappeared
- ◆ Now I don't feel like fainting. I feel strength in my body, I feel healthier

- ◆ We feel happy that our child would be born healthy
- ◆ Swelling in my body had reduced a lot

The women reported that initially they had tendency to vomit or actual vomiting would occur on consuming IFA but now they don't have such side effects. Black colour stool, which used to worry them earlier, has now no more an issue of concern for them.

The best friend and mentor of the pregnant women is the ANM and then the AWW. So when the women suffered the side effects of consuming IFA, they consulted the ANM/AWW of their area and sought their advice on the issue. The most common side effect that bothered them was the tendency to vomit or actual vomiting after consuming IFA. Some of the advices on vomiting after consuming IFA that the women could recall are enumerated below :

- ◆ Consume IFA at bed time
- ◆ The ANM told me to consume IFA after one hour of taking meal
- ◆ After consuming IFA, we should drink lots of water to avoid vomiting
- ◆ To curb the tendency to vomit, drink limewater with a pinch of salt in it
- ◆ Do not discontinue; tendency to vomit will disappear with the passage of time
- ◆ If the problem persists, then consume IFA on alternate days

We tried to identify and talk to such women and adolescent girls in the project area who refused to consume IFA. It needs to be highlighted here that we made lot of effort to find such women and girls in the project area but we could only get hold of such women and girls who had consumed IFA but discontinued it because they said that it did not suit them. They said that they had tried to continue it but could not sustain the side effects. All such women and girls were found to be well aware of the various issues related with IFA/anemia but said that they feel sick after consuming IFA and thus do not consume it.

## **Family Support**

Most of the women said that now their husband and other family members encouraged them to regularly consume IFA and supported them when they suffered side effects. Earlier, their husband/family members would suggest to discontinue IFA consumption for some days but now they suggest consulting the ANM/AWW and tell them to try to continue. Now many of them have come to know that it is normal and not harmful for the child or the mother.

In fact, many women reported that their husband now remind them to consume IFA regularly and not to miss it on any day. They would also tell us to ask for more IFA from the ANM when we exhausted our supplies. The adolescent girls also said that initially they had the tendency to vomit and sometimes vomiting would occur on consuming IFA but now all this has disappeared. They said that they were encouraged by their family members to consume IFA.

However, many pregnant women said that it is very important to educate their family members also about the importance of IFA and its possible side effects because without the support of the family members and guidance and assurance of the ANM/AWW, it is not possible for her to continue consumption of IFA, especially when they suffer from side effects.

More awareness is required about the side effects especially vomiting, as people fear of harm to the mother and the unborn child and tend to discontinue consumption of IFA.

## **Overall Effectiveness**

The effectiveness of any intervention can be successfully gauged by interacting with the target beneficiaries and assessing the change in their perception, attitude and practices. The women confessed that earlier when they used to receive IFA tablets, they would

throw them away and not consume it. They said, earlier we used to think that when I am not ill, why should I take any medicine.

However, now we have understood the seriousness of anemia and majority of women consume IFA and feel better. The women said that now we stress on cleanliness of the kitchen and the process of cooking food. We also try to eat three different types of food items in our meals as per our affordability.

However, there is no denying the fact that there are still many women and their family members who do not attach the significance needed for consuming IFA by pregnant women. Here we need to appreciate the fact that the target group — pregnant women, lactating women and adolescent girls, is a very dynamic group. There is a continuous addition of new members to this group, who needs to be sensitized and brought into the compliant category.

It will take quite sometime before we reach a stage when all the target group women and girls themselves start consuming IFA without any fear or repeated reminders, nor any misguided advice of their household members would make them shun its consumption.

The pregnant women also suggested methods to encourage the target group (pregnant & lactating women and adolescent girls) to regularly consume IFA. In order to ensure regular and complete compliance, the following suggestions were given by the pregnant women :

- ◆ Some tests of the women should be done in the hospitals to check what changes have occurred in her due to consumption of IFA.
- ◆ Healthy mother competition should be organized in the villages.
- ◆ There should be some method to help women keep a track of the number of IFA consumed by her.

- ◆ Some nutritious food should be distributed at the AWC.
- ◆ Video vans should be used to propagate the importance of IFA.
- ◆ IEC materials are very sparse. They are not visible much.
- ◆ IEC materials should be in local language.
- ◆ Miking is very effective method to familiarize IFA among the villagers.
- ◆ At least once a month an educated woman of the village should tell about IFA and explain every aspect with the help of pictures/photographs in a meeting, which is attended only by women and adolescent girls. It is not possible to discuss everything with the males also present in the meeting.
- ◆ Male members need to be educated, as the women are ready to consume IFA but sometimes the men resist.
- ◆ Sometimes IFA is out of stock in the AWC and this results in discontinuation. Regular supply of IFA should be ensured.

## **5. View of Service Providers on the Project**

### **Training**

The ANMs, AWWs and the VHWs said that they received three days training at Vikas Bharti, Bishunpur on their role and responsibilities under the project. In the training, the stress was to first understand ourselves the acuteness and the vastness of the problem in the project area. We were told about what is anemia, its causes, symptoms, its ill

effects and the significance of consuming IFA and iron rich food by pregnant women, lactating women and adolescent girls. We were also guided on the counseling methods that we should follow while talking to the target beneficiaries.

We were informed that 90 percent of the women in the area were anemic which was alarmingly high. To control anemia in the area, consumption of IFA was to be encouraged as a necessary supplement rather than as a medicine. Apart from this, we were trained to use various counseling aids like, flip book, calendars, cards, to counsel the target group on the significance of consuming IFA/iron rich food for healthy living. We were told to provide 100 IFA tablets to all pregnant & lactating women and 200 tablets to all anemic women in the area. Adolescent girls of the area were to be given 52 tablets, to be consumed 1 tablet per week for 1 year.

The ANMs, AWWs and the VHWs said that apart from supply of IFA to the target group, we had the responsibility to ensure that they consumed it regularly. We were mandated to visit the households of the target group to inform the importance and benefits of IFA. All possible side effects of consuming IFA like, tendency to vomit, actual vomiting, black stool, dizziness, etc. and their remedy were also explained to us, so that we were aware of what to advise to the women/girls.

Our responsibility was to ensure that there was no anemic person in the area, as anemia leads to many other ailments and problems. Control on anemia, especially among pregnant women would reduce maternal and infant mortality rates. We would tell the pregnant women that IFA tablets are the food for your unborn child in the womb. The day you would not consume the tablet, your child in the womb would remain hungry.

### **IEC Activities**

The MOICs and the CDPOs of all the project blocks said that the IEC activities under the project were a great support not only to propagate the message of the project and increasing awareness among the villagers, but also in enhancing the knowledge of ANMs and AWWs on the various do's and don'ts concerning IFA/anemia. The ANMs in block Sisai said that IFA should be given to adolescent girls was a revelation for them.

The ANMs, AWWs and the VHWs said that the IEC materials helped us recall all the messages that we learnt during the training at the start of the project. The IEC materials — flipbooks, calendars, cards helped us to counsel better. Nukkad natak and jingles in local language were popular IEC activities that spread the message to a large number of people in very short time.

The counseling aids, nukkad natak and the jingles were so effective that there has been a spurt in the demand of IFA by the women in the area. The pictorial depictions in the flipbook and the calendars were also very helpful to counsel and also easy to comprehend for the women/girls.

The ANMs, AWWs and the VHWs said that now we don't have to make lot of effort like before to convince the women to consume IFA. So much so that now, often we were not

able to meet the demand of IFA from the supplies that we get from the PHC. Now women listen to us attentively and adhere to our advice.

The ANMs said that earlier we had lots of IFA tablets spare with us. Now, we are not left with any. As soon as we get the supplies from the PHC, it is taken away by the women. The IEC activities alongwith personal counseling had also helped in dispelling the unnecessary fear of side effects among the women. Now, they have understood that the side effects are temporary and not harmful.

Interpersonal communication had a contagious effect. On consuming IFA when some women felt the benefits, they talked about it with other women in the village and advised them to give it a try. In this way, the number of women asking for and actually consuming IFA substantially increased. Now, such women who earlier refused to take IFA were demanding it.

The MOICs, CDPOs and the field functionaries (ANMs, AWWs and VHWs) suggested that nukkad natak should be done more frequently as it was the most popular and effective method of communication in the rural areas. It also had a longer retention life in the memory of the target group. Moreover, it was seen by all the villagers, including men and other household members, educated and uneducated both. This helped in garnering support of the household members of the women and the girls in regularly consuming IFA.

Calendars were reported to be in short supply and thus, could not be distributed to all the target beneficiary households. Also, the AWWs suggested that the calendars should have picture of pregnant women consuming IFA prominently displayed on it.

### **Support of Vikas Bharti**

The biggest support that the ANMs/AWWs got was the exhaustive training at Vikas Bharti before the start of the project. The facts and figures explained to them during the



Initially when the VHWs started their work in the villages after getting trained at Vikas Bharti, they worked with great zeal and enthusiasm. Later on they were a demotivated group and their contribution to the project dwindled with the passage of time. Since the VHWs were not given any regular honoraria, they were discouraged by their family members to perform their duty under the project. Also, since no refresher training of the VHWs was organized after the initial training at Vikas Bharti, they became complacent and less motivated.

The VHWs said that they received Rs. 500/- once during the entire project period. This amount was given to each of them as appreciation of their work after completing six months in the project. Since then, around one year has elapsed and they have not received any monetary support by the project for their work. They said that they need some financial support from the project to continue doing work under the project.

Senior Vikas Bharti representatives said that there was no provision of any regular monetary compensation to the VHWs under the project. At the time of their selection, they were identified as self-motivated, outgoing individuals who would be trained under the project and given counseling aids for support. They were volunteers of the project and in recognition of their contribution to the project, a token amount of Rs. 500/- to each VHW was given by Vikas Bharti from the project fund for rewards and recognition.

Vikas Bharti representatives said that the project was initially for a period of six months on a pilot basis and the fund provided by the project under the rewards and recognition head was used to give a token amount of Rs. 500/- to each VHW for their contribution. After one year, the project was extended initially for six months and then twice for one month each. However, for the extended period, no monetary provision was made for reward/recognition. Hence, no further payment could be made to the VHWs.

The level of involvement of the VHWs and the credibility of the organization, both are equally important for the success of the project. All the functionaries involved in the project believed that an organization was as good as the people working for it. So long as the work was done properly by the VHWs, the organization would have its credibility and goodwill intact in the minds of the people.

A major reason for the success of the project is that local village level functionaries were deputed as the VHW. This project can be successfully implemented by any organization in any part of the State by having local village level functionaries as VHW. Also, the VHW would have to sincerely work to establish the goodwill for himself and the organization in order to make inroads into the age-old lifestyle of the people.

### **Visits of Field Functionaries**

The ANMs visited the villages in their project area as part of their routine micro-plan. The villagers would be informed in advance about the date of visit of the ANM by the AWW/VHW. The ANMs said that now more number of women and girls would come to meet her during the monthly visit to the villages. The enhanced awareness is manifested by the fact that now more women consume IFA than before and when they exhausted their supply, would demand for more.

Now the women shared their other health related problems with the ANMs, AWWs and VHWs without hesitation and they would counsel them accordingly. With the benefits of IFA prominently visible to the women in their day-to-day life, the women are more receptive to counseling and were now more cordial than ever before.

The AWWs who were more frequent visitors to the women/girls, said that due to our regular interactions with the women/girls, now they were more affable and were candid in their discussions with us. The VHWs during their visits, would try to familiarize the women with other health related issues also like, protection from malaria, diarrhoea and

would advise them to get TT injection when the ANM visited the village. Hygiene and healthy fooding habits were other issues that were discussed with them during the visits.

The AWWs said that miscarriage is a common phenomenon in the area and this happened primarily because of lack of proper diet and fragile physique of the women. The VHWs said that they garnered support of literate women in the village and take their help in convincing other women of the village.

### **Monitoring Activities**

Counting the number of missing tablets in the IFA strip given during the previous visit was the most potent method of monitoring whether the women were consuming IFA or not. Another method of confirming consumption was the fact that the women complained of side effects that were generally associated with the consumption of IFA.

A novel method of monitoring the regular consumption of IFA by adolescent girls was by giving them IFA to consume in the presence of everybody during the weekly meeting in the village. It also helped to remind the women as well, to regularly consume IFA themselves.

No specific monitoring and evaluation of the project was undertaken by the MOICs and the CDPOs. The Civil Surgeon Gumla said that the enhanced demand of IFA in the project area was an indicator of the effect of the project interventions.

### **Support of Community Influencers**

The community influencers said that the training that they received under the project was very informative and a great learning experience for them. They said that they were aware that they had to play the role of a frontrunner in this awareness campaign of the anemia control project. It was reported by the ANMs/AWWs that during the initial period of the project, the community influencers were involved in talking about IFA/anemia in the village meetings.

However, it was observed that in the later stage of the project, they took very less interest and had a minimal role in the project. Earlier, during the village meetings the religious leaders (*baiga, pahan, pujari*) would appeal to the people to consume IFA/iron rich food and would tell them about its benefits, especially for the pregnant women, lactating women and the adolescent girls.

### **Availability of IFA**

Not able to meet the growing demand of IFA in their area was the most common woe of the ANMs. They said that when we exhausted the supplies of IFA at our Sub-Center, we would collect it from the PHC. The ANMs also stocked some IFA with the AWW at the AWC. However, there had been several occasions when all stocks with the ANM and the AWW would exhaust and there were none at the PHC either.

The shortage of IFA was attributed to the tremendous increase in the demand due to the project's interventions. However, it was reported by the ANMs of block Palkot, Raidih and Sisai that during the past six months, the supply of IFA tablets from the PHC had also reduced in comparison to before. They said that earlier they used to get 15000 large IFA and 13000 small IFA annually from the PHC. Now, they get only 2000 large IFA and 3000 small IFA tablets annually from the PHC.

### **Overall Effectiveness**

The ANMs said that the project had succeeded in creating awareness among the villagers about IFA/anemia, through various IEC activities and interpersonal communication. Earlier, large number of women would not consume IFA and their family members were also not in favour of it. Earlier when we used to give them IFA tablets, they would either not take it or if they took it, would throw them away and not consume it.

There is mass illiteracy in the area. It was difficult to convince people easily with their established mindset over generations. However, with extensive counseling and IEC support, slowly we were able to make people think and accept the practices and the messages of the project.

Now the scenario has improved and many women and their family members have understood the significance of IFA/iron containing food for healthy living. They were now not only consuming IFA tablets that we give to them but would voluntarily come to us to demand more, when they exhaust their stock at home. This was substantiated by the fact that now we were not left with any IFA when we return from our visit to the villages. Earlier when we used to visit the villages, we could find lot of IFA still remaining with the AWW that we had given in our previous visit. Now, we no more witness such sights.

To make the project more successful, the VHWs need to be rejuvenated by the project. Nukkad natak and video film on the project on mobile vans should be shown. ANMs of blocks Bishunpur and Sisai said that the women of their area demand Ferro Plus tablets which has become very popular among them.

The MOICs and the CDPOs of the project area believed that Vikas Bharti has a strong network of people in the area and due to their good work in the past in various public welfare activities, it had goodwill in the area. That is why Vikas Bharti gets lot of public support in its activities. For any organization to be successful in running such projects, it will have to have dedicated people with whom the local people could relate themselves.

The Civil Surgeon, Gumla said that the project has been instrumental in enhancing awareness about IFA/anemia among the target group. In comparison to the pre-project period, now, much more number of pregnant women have started consuming IFA. She added that earlier, no lactating women and adolescent girl was consuming IFA but now,

they have also understood the significance of IFA and have started demanding and consuming it.

The State RCH Officer was enthused with the performance of the project and expressed happiness that the project has been able to generate awareness about IFA/anemia among the people of the project blocks. She said that her department was prepared to take the challenge of increased demand of IFA in the project area.

## **6. Monitoring Activities under the Project**

At the village/tola level, the Village Health Worker (VHW) visited all the households every month to identify the households where there was a pregnant women. Thus, the VHW had a list of all pregnant women in her area that was updated on a monthly basis.

### **Checklist for the VHWs**

There was a checklist for the Village Health Workers that was filled by her on a weekly basis. It was an instrument by which the VHW documented all major project activities in her area on a weekly basis. In the checklist, the VHW recorded the total number of target beneficiaries (pregnant women, lactating women and adolescent girls) in the area. Record was also maintained of the number of beneficiaries regularly consuming IFA. Reasons for not consuming, for those who reported that they were not consuming was also recorded.

Apart from this, some other information that was recorded in the checklist were — whether IFA was being regularly distributed at the distribution center or not? Whether the target beneficiaries were coming to the distribution center for IFA, or not? Whether, the target beneficiaries were consuming IFA, or not? How was this being ensured? Knowledge/awareness level of the villagers about IFA and anemia? Regular meetings of the mahila mandal were being organized or not?

### **Questionnaire for Pregnant Women**

There was a questionnaire for pregnant woman that was canvassed by the VHW to all the pregnant women in her area every week. It was an instrument by which the VHW would keep track of all pregnant women in her area on a weekly basis. It was a one-sheet questionnaire for each woman, in which the name of the pregnant woman alongwith the number of months of her pregnancy was recorded.

Apart from this, the VHW asked whether the pregnant woman consumed IFA tablets every day, last week? If not, then why? If yes, the VHW would verify the number of missing tablets in the IFA strip. Some other questions asked by the VHW were — What inspired you to consume IFA tablets regularly? Did you have any side effects due to consuming IFA? If yes, what were they and how did you overcome them? Does any family member encourage you to consume IFA? If yes, then how? Did anybody visit you last week to remind you to take IFA? Can you recall their suggestions that inspired you to consume IFA?

### **Questionnaire for Household Members of Pregnant Women**

There was a separate questionnaire for the household members of pregnant women that was canvassed by the VHW to a responsible household member of the pregnant woman every week. It was an instrument by which the VHW tried to know on a weekly basis the involvement of the household members in ensuring consumption of IFA by the pregnant woman of the household. It was a one-sheet questionnaire for each household in which the household member was asked whether he/she knew that the lady in the household was pregnant? If he/she knew, then the number of months of pregnancy was asked.

Apart from this, the VHW asked whether the pregnant woman got her ANC done? Does the respondent know, since when was the pregnant woman in the household consuming IFA and how many tablets she consumed last week? If she does not consume IFA, how do you inspire her to take it? How else the household members of the pregnant woman inspired her to regularly consume IFA? Lastly, the VHW asked the household members if they had any query related to IFA?

### **Questionnaire for Members of Social Support Group**

There was a questionnaire for the members of the Social Support Group (SSG) in the village that was canvassed by the VHW to all the members in the area every week. It was an instrument by which the VHW kept herself abreast with the level of involvement of these members with the project on a weekly basis. It was a one sheet questionnaire for each member in which the VHW asked the members as to how many pregnant women did he/she visit last week? Out of them, how many were regular in consuming IFA? Did anyone complain about the side effects to you? What were the side effects? What suggestions did you give to her? Were you successful in inspiring the pregnant women in consuming IFA? How did you inspire/motivate the pregnant women to consume IFA?

## **Summary Reports and Plan of Action of VHWs**

The VHW prepared three separate summaries of all the three questionnaires — questionnaire for pregnant woman, questionnaire for household members of pregnant woman and questionnaire for members of the Social Support Group.

All information gathered/compilations made during the week were discussed in the weekly meeting of the VHW and the SSG members wherein, all the problems were identified for each pregnant woman, lactating woman and adolescent girl. After identifying the problems, a plan of action was developed to address those problems during the following week.

This plan of action consisted of the individual problems; solutions proposed for these problems during the meeting; and assigning responsibility to implement the proposed solution to the VHW or any SSG member. A list of all materials required to implement the proposed solution was prepared and the time frame by which the intervention was proposed to be completed was fixed.

## **Plan of Action of Cluster Resource Persons**

Every week, the Cluster Resource Person (CRP) compiled an integrated report of his cluster from the weekly summary reports of all the VHWs of his cluster. From the weekly reports and the plan of action of all the VHWs, the CRP prepared his plan of action for the following week.

## **Plan of Action of Block Coordinators**

Similarly, every week, the Block Coordinators compiled an integrated report of his block from the weekly summary reports of all the CRPs of his block. From the weekly reports and the plan of action of all the CRPs, the Block Coordinator prepared his plan of action for the following week.

## **State Level Monitoring**

All the 5 Block Coordinators would send their monthly report to the Project Coordinator at Vikas Bharti, Bishunpur, where all the reports were appended and compiled. The Project Coordinator would send the monthly progress report of the entire project to the MOST/AED State office at Ranchi.

## **7. Assessment of Anemia Among Service Providers**

### **Test of Haemoglobin Level of Field Functionaries**

The project was implemented by participatory method, where there was opportunity to learn for all. Around 1200 project functionaries (ANMs, AWWs, VHWs) worked in the project at the field level, directly interacting with the target beneficiaries. These field level functionaries were local people belonging to the project area. They were well trained on



In all the project blocks, an improvement in the average haemoglobin level of the project functionaries was observed.

In the pre-project period, the average haemoglobin level in none of the five project blocks was anywhere near 11 g/dl — the usual cut-off used by clinicians in Jharkhand for anemia. However, in the post-project period, in two blocks, the average haemoglobin level of the functionaries reached above 11 g/dl (Bishunpur : 11.25 g/dl and Ghaghra : 11.03 g/dl)

Project Block	(n)	Average Hemoglobin Level (g/dl) of Health Functionaries (AWWs, VHWs, ANMs)		Difference in Hg Level (g/dl)	Statistical Significance of the difference
		Pre-Project	Post-Project		
Bishunpur	60	10.07	11.25	1.18	Significant at $p < 0.01$
Ghaghra	60	9.43	11.03	1.60	Significant at $p < 0.01$
Palkot	60	9.20	10.99	1.79	Significant at $p < 0.01$
Raidih	55	9.63	10.81	1.18	Significant at $p < 0.01$
Sisai	60	10.12	10.79	0.67	Significant at $p < 0.01$
<b>Overall</b>	<b>295</b>	<b>9.69</b>	<b>10.98</b>	<b>1.29</b>	<b>Significant at <math>p &lt; 0.01</math></b>

In block Palkot, it has improved from 9.20 g/dl to 10.99 g/dl (significant at  $p < 0.01$ ). In the remaining two blocks also there has been significant improvement — Raidih from 9.63 g/dl to 10.81 g/dl (significant at  $p < 0.01$ ) and Sisai from 10.12 to 10.79 g/dl (significant at  $p < 0.01$ ).

Category-wise comparative status of the pre-project and the post-project average haemoglobin level of the functionaries is presented below :

Project Functionary	(n)	Average Hemoglobin Level (g/dl) (AWWs, VHWs, ANMs)		Difference in Hg Level (g/dl)	Statistical Significance of the difference
		Pre-Project	Post-Project		

<b>AWWs</b>	<b>120</b>	9.47	10.91	1.44	Significant at $p<0.01$
<b>VHWs</b>	<b>125</b>	9.94	11.11	1.17	Significant at $p<0.01$
<b>ANMs</b>	<b>50</b>	9.62	10.81	1.19	Significant at $p<0.01$
<b>Overall</b>	<b>295</b>	<b>9.69</b>	<b>10.98</b>	<b>1.29</b>	<b>Significant at <math>p&lt;0.01</math></b>

The average haemoglobin levels of all categories of functionaries show an improvement. Among the VHWs, the average pre-project haemoglobin level shows significant improvement from 9.94 g/dl to 11.11 g/dl (significant at  $p<0.01$ ).

Similarly, there has been a significant improvement in the average haemoglobin level among the AWWs (from 9.47 g/dl to 10.91 g/dl) (significant at  $p<0.01$ ) and the ANMs (from 9.62 g/dl to 10.81 g/dl) (significant at  $p<0.01$ ).

### Proportion of Anemic Field Functionaries

Overall, at the pre-project stage, more than three-fourth (77 percent) of the functionaries were anemic ( $Hg<11g/dl$ ). In the post-project period, the proportion of anemic functionaries was found to be significantly low at 50 percent (significant at  $p<0.01$ ).

Project Block	(n)	Proportion of Anemic Field Functionaries ( $Hg < 11g/dl$ ) (AWWs, VHWs, ANMs)		Statistical Significance of the difference
		Pre-Project	Post-Project	

<b>Bishunpur</b>	<b>60</b>	75.00 %	50.00 %	Significant at $p<0.01$
<b>Ghaghra</b>	<b>60</b>	76.67 %	41.67 %	Significant at $p<0.01$
<b>Palkot</b>	<b>60</b>	83.33 %	48.33 %	Significant at $p<0.01$
<b>Raidih</b>	<b>55</b>	78.18 %	52.73 %	Significant at $p<0.01$
<b>Sisai</b>	<b>60</b>	70.00 %	56.67 %	Not Significant
<b>Overall</b>	<b>295</b>	<b>76.61 %</b>	<b>49.83 %</b>	<b>Significant at <math>p&lt;0.01</math></b>

In block Bishunpur, at the pre-project stage, 75 percent functionaries were anemic ( $hg<11g/dl$ ), while in the post-project period, this proportion has significantly reduced to 50 percent (significant at  $p<0.01$ ). Similarly, in block Ghaghra, at the pre-project stage, 77 percent were anemic, in the post project period it has significantly come down to 42 percent (significant at  $p<0.01$ ).

In blocks Palkot and Raidih also, the proportion of anemic functionaries has significantly reduced from 83 percent to 48 percent (significant at  $p<0.01$ ) and from 78 percent to 53 percent (significant at  $p<0.01$ ) respectively.

All the three categories of functionaries show a significant decrease in the proportion of anemic cases in the post-project period, in comparison to the pre-project period. In the pre-project period, while an overwhelming 83 percent AWWs were found to be anemic, the proportion of such AWWs in the post-project period has significantly reduced to 51 percent (significant at  $p<0.01$ ). Similarly, in the pre-project period around three-fourth of VHVs were anemic, which has significantly come down to 47 percent (significant at  $p<0.01$ ).

In the pre-project period, while 74 percent ANMs were found to be anemic, the proportion of such ANMs in the post-project period has also significantly reduced to 54 percent

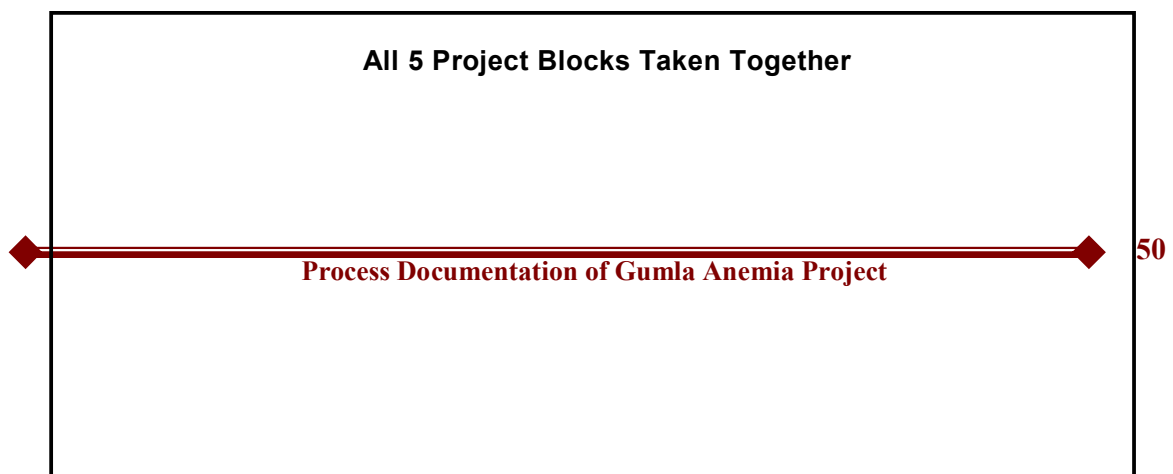
(significant at  $p < 0.05$ ). Category-wise proportion of anemic functionaries in the post-project period, in comparison to the pre-project period is presented below :

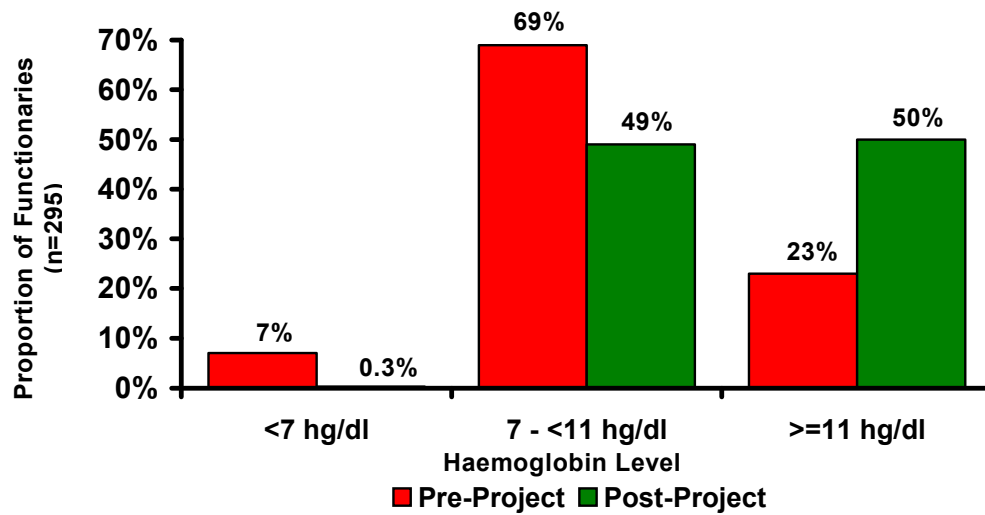
Project Functionary	(n)	Proportion Anemic (Hg <11g/dl)		Statistical Significance of the difference
		Pre-Project	Post-Project	
<b>AWWs</b>	<b>120</b>	82.50 %	50.83 %	Significant at $p < 0.01$
<b>VHWs</b>	<b>125</b>	72.00 %	47.20 %	Significant at $p < 0.01$
<b>ANMs</b>	<b>50</b>	74.00 %	54.00 %	Significant at $p < 0.05$
<b>Overall</b>	<b>295</b>	<b>76.61 %</b>	<b>49.83 %</b>	<b>Significant at <math>p &lt; 0.01</math></b>

It needs to be appreciated that behavioural changes are slow phenomenon and such changes take time to be accepted and brought into practice. The status of average haemoglobin level and the proportion of anemic field functionaries in the post-project period indicate that a lot has been achieved under the project. Nevertheless, still much remains to be achieved.

Further analysis of the haemoglobin level of the functionaries show that there has been a tremendous shift towards the better in the haemoglobin level of these functionaries. In the pre-project period, only 23 percent functionaries were observed to have haemoglobin level of 11 g/dl or above, while in the post-project period this proportion has more than doubled at 50 percent.

Similarly, in the pre-project period, more than two-third (69 percent) functionaries were observed to be moderately/mildly anemic (hg 7 to <11 g/dl), while in the post-project period this proportion has reduced to 49 percent.





There were 7 percent severely anemic functionaries in the pre-project period, which is almost non-existent in the post-project period.

## 8. Project Learnings

### Training Modules

The training modules prepared for various levels were very comprehensive and easy to comprehend. They were rich in content and the pictorial depictions, slides and the

explanatory notes were very useful. They covered in detail the project processes & issues on awareness & knowledge on anemia and also its causes & the consequences. Counseling skills explained to facilitate the counselors, were very helpful in the field.

## **Training**

The training given to the project functionaries were very comprehensive. The enthused functionaries evolved innovative linkages between the mother, the child in the womb and IFA to motivate the women to consume IFA. They would tell the pregnant women that IFA tablets are the food for your unborn child in the womb and this magic sentence had a major impact on the pregnant women.

Initially when the VHWs started their work in the villages after getting trained at Vikas Bharti, they worked with great zeal and enthusiasm. More such trainings should have been organized from time to time to keep them motivated.

## **Role of VHWs**

The VHW being local person of the village had a greater access to the feelings and thoughts of the villagers. The VHW could gel well with the women and girls of her area and could play a pro-active role in the project.

Since the VHWs were not given any regular honoraria under the project, they were discouraged by their family members to perform their duty under the project. Also, since no refresher training/orientation of the VHWs was organized after the initial training at Vikas Bharti, the VHWs became complacent and less motivated. To make the project more successful, the VHWs need to be rejuvenated by the project.

## **Support of Community Influencers**

The Community Influencers were respected people of the village and the people of the village followed their advice sincerely, their involvement in the meetings in which the project was discussed had a very positive impact on the villagers.

During the initial period of the project, the community influencers were involved in talking about IFA/anemia in the village meetings. They said that the training that they received under the project was very informative and a great learning experience for them.

However, it was observed that in the later stage of the project, they took very less interest and had a minimal role in the project. Earlier, during the village meetings the religious leaders (*baiga, pahan, pujari*) would appeal to the people to consume IFA/iron rich food and would tell them about its benefits, but later on they became demotivated and uninterested.

### **Visits by Project Functionaries**

Regular visit of the ANM to the village and the support of the AWW is a great motivation for the pregnant women to get their regular check-ups during pregnancy. The Anganwadi Worker has a major role, as she is the regular interface between the women and the project activities.

It was the opinion of the pregnant women that the visits/meetings with the ANM and the AWW, as always were the greatest motivation for them. They said that the ANM and the AWW would provide counseling & medicine and take care of them and that the women had tremendous faith on the ANM and the AWW.

The AWWs who were more frequent visitors to the women/girls, said that due to our regular interactions with the women/girls, now they were more affable and were candid in their discussions with us.

Interpersonal communication had a contagious effect. On consuming IFA when some women felt the benefits, they talked about it with other women in the village and advised them to give it a try. In this way, the number of women asking for and actually consuming IFA substantially increased.

### **Village Meetings**

The regular meeting of the VHW and the Social Support Group members to share the outcome of her visits to these pregnant women was very useful. In these meetings, they discussed and prepared an action plan as per the requirement of each case in the village.

At several places in these meetings, all adolescent girls were given IFA to consume in the presence of everybody to make IFA popular and to ensure that it is consumed. This is a novel method to remind the women as well, to regularly consume IFA themselves. The adolescent girls appreciated the significance of these meetings in increasing awareness about IFA/anemia. They expressed that they should also be called in these meetings.

The village meetings should sometimes be addressed by the ANM and by a doctor. The presence of the ANM and the doctor in the meetings would have a lasting impression on the target group.

The household members also needed to be educated about the menace of anemia and the importance of regular intake of IFA tablets and healthy fooding/living habits. This aspect of the project was weak and should have been taken care of in the village meetings more vigorously.

### **Exposure to IEC Activities**



been several occasions when all stocks with the ANM and the AWW would exhaust and there were none at the PHC either.

The women said that when there is a gap of some days, we feel that now what is the use of consuming it, as it would not work because of break in continuity. The adolescent girls of Ghaghra reported that they never got any IFA tablet.

### **Consumption of IFA**

The women confessed that earlier when they used to receive IFA tablets, they would throw them away and not consume it. They said, earlier we used to think that when I am not ill, why should I take any medicine. However, now they have understood the seriousness of anemia and majority of women consume IFA and feel better.

The best friend and mentor of the pregnant women is the ANM and then the AWW. So when the women suffered the side effects of consuming IFA, they consulted the ANM/AWW of their area and sought their advice on the issue. In comparison to before, now much more number of women have started consuming IFA.

### **Family Support**

Most of the women said that now their husband and other family members encouraged them to regularly consume IFA and supported them when they suffered side effects. Earlier, their husband/family members would suggest to discontinue IFA consumption for some days but now they suggest consulting the ANM/AWW and tell us to try to continue.

In fact, many women reported that their husband now remind them to consume IFA regularly and not to miss it on any day. They would also tell us to ask for more IFA from the ANM when we exhausted our supplies. The adolescent girls also said that they were encouraged by their family members to consume IFA.

However, still more awareness is required about the side effects especially vomiting, as people fear of harm to the mother and the unborn child and tend to discontinue consumption of IFA.

The pregnant women said that it is very important to educate their family members also about the importance of IFA and its possible side effects because without the support of the family members and guidance and assurance of the ANM/AWW, it is not possible for her to continue consumption of IFA, especially when they suffer from side effects.

### **Support of Vikas Bharti**

Vikas Bharti has its presence in the villages of the project area for many years now. Vikas Bharti has been working for the people of the area on various fronts and the people have developed faith that if Vikas Bharti is involved in a project, it would be for the benefit of the people with no ulterior motives. The VHWs posted by Vikas Bharti have been instrumental in making the presence of Vikas Bharti stronger in the villages.

The VHWs were of the view that the level of involvement of the VHWs and the credibility of the organization, both are equally important for the success of the project in any part of the State. If the organization had a good reputation in the area because of its sincerity and support to the local people in the past, it should be able to work in any part of the State with local people as its village level functionaries.

An organization was as good as the people working for it. So long as the work was done properly by the VHWs, the organization would have its credibility and goodwill intact in the minds of the people. This is the reason, if this project was carried on by any other organization, it would have to have local village level functionaries as VHW. Also, the VHW would have to sincerely work to establish the goodwill for himself and the organization in order to make inroads into the age-old lifestyle of the people.

## **Monitoring Activities**

Counting the number of missing tablets in the IFA strip given during the previous visit was the most potent method of monitoring whether the women were consuming IFA or not. Another method of confirming consumption was the fact that the women complained of side effects that were generally associated with the consumption of IFA.

A novel method of monitoring the regular consumption of IFA by adolescent girls was by giving them IFA to consume in the presence of everybody during the weekly meeting in the village. It also helped to remind the women as well, to regularly consume IFA themselves.

All information gathered/compilations made during the week and the discussions in the meeting of the VHW and the SSG members was helpful in identifying the target group and their problems. This helped in focused intervention on such cases.

## **Overall Effectiveness**

Now the scenario has improved and many women and their family members have understood the significance of IFA/iron containing food for healthy living. They were now not only consuming IFA tablets that were given to them but would voluntarily come to demand more, when they exhaust their stock at home.

We need to appreciate the fact that the target group — pregnant women, lactating women and adolescent girls, is a very dynamic group. There is a continuous addition of new members to this group, who needs to be sensitized and brought into the compliant category. It will take quite sometime before we reach a stage when all the target group women and girls start consuming IFA on their own, without any fear or repeated reminders. Nor any misguided advice of their household members would make them shun its intake.

