

Production of Fortified Blended Complementary Food by Women's Self-Help Groups in India



Project overview

After the GIVE-A-DAY event by BESTSELLER in 2015, BESTSELLER donated 17,860,000 DKK to GAIN to support its essential nutrition programs in India. This is the overview results report of the three key project components which GAIN has implemented in the last three years, from August 2015 to July 2018.

Through funding from BESTSELLER, GAIN worked in the states of Karnataka and Bihar in India, to improve the nutrition and lives of groups of semi-literate women and children. GAIN equipped women's Self-Help Groups (SHGs) to produce nutritious food rations. In Rajasthan, BESTSELLER funding was used to support treatment of children with severe acute malnutrition (SAM).

The GAIN-BESTSELLER key project achievements

- ✓ Treatment of 9,640 children suffering from Severe Acute Malnutrition in the State of Rajasthan¹.
- ✓ 4 production units in India have been established which produce Fortified Blended Food (FBF) aiming to prevent malnutrition (two units in the state of Bihar, and two in the state of Karnataka)
- ✓ The production units which are owned and operated by women's Self-Help Groups are financially viable
- ✓ More than 60,000 beneficiaries are being reached by Fortified Blended Food (FBF) from these women-owned production units
- ✓ Preliminary findings of the impact evaluation² in Karnataka show significant improvement in the nutritional status of children and adolescent girls in the Intervention group compared to the control group.

Malnutrition in India is high, and millions are dependent on public food distribution

Malnutrition in children is a major public health problem in India, especially in the context of current socio-economic development. Not only does malnutrition increase the risk of morbidity and mortality associated with common childhood illnesses, it also leads to compromised growth, and impaired psychosocial and cognitive development in children, thus adversely affecting the potential of human capital.

Despite strong economic growth over the past decades, India has one of the world's highest demographics of children suffering from malnutrition. According to the Global Nutrition Report 2016, almost 39% of Indian children under the age of 5 are underweight, while 48% of women suffer from anemia. The proportion of severely malnourished children in India between (6-59) months is estimated at 7.5% in the National Family Health Survey (NFHS: 2015-16).

¹ Treatment of 5,000 children was provided by BESTSELLER funds, the rest by other GAIN donations

² The costs for performing this evaluation was funded outside this GAIN/BESTSELLER grant

Low income consumers suffer the most from the negative consequences of both undernutrition and overweight/obesity. They often lack access to diverse diets and nutritious foods, and they tend to consume too much of certain types of food – mostly starchy foods like rice and wheat, or ultra-processed foods, which are inexpensive and filling, but lack micronutrients such as vitamin A, iron, and zinc, which are essential for good health.

The provision of nutrition-related services by the government for women and children is primarily delivered through the Integrated Child Development Services scheme (ICDS). This scheme of the Ministry of Women and Child Development provides services such as immunization, supplementary nutrition, nutrition and health education, health check-ups and referral services to all children under the age of six, pregnant and lactating mothers, as well as all adolescent girls. It also promotes pre-school non-formal education.

The other food-based public-funded scheme called Public Distribution System (PDS) is one of the largest safety net programs in India, set up to provide subsidized grains to the poor. Although it began as a universal program in the context of food shortages in the early years of the nation, since 1997 it has been targeted towards the poor, providing rice, wheat, sugar and kerosene at highly subsidized prices to the poor. The National Food Security Act (NFSA) 2013 envisages providing subsidized food grains to over two-thirds of India's population.

In 2004, following sustained civil society action, the Supreme Court of India directed that state governments should adopt decentralized models for the production and distribution of supplementary nutrition to targeted groups. The Court also emphasized the need to engage with women's groups in doing so. Concurrently, the central government also directed that the supplementary nutrition products should be micro-nutrient fortified and produced with minimum manual handling.

The GAIN-BESTSELLER project

The main goal of the project was to prevent malnutrition and provide a viable model of decentralized production of Fortified Blended Food (FBF) by women's Self-Help Groups (SHGs). The objectives were to:

- Increase coverage of and access to high quality FBF products for pregnant women, lactating mothers and children under 3 years of age targeted by the ICDS through sustainable local production units
- Increase women's empowerment and household decision-making through employment (income, mobility and status) from Self-Help Groups, and
- Build sustained support from government for the maintenance and scale up of the decentralised production model.

An additional goal added during the project was:

- To treat children suffering from severe acute malnutrition, a situation which otherwise could have proven to be fatal.

Table 1. Overview of three projects in three Indian states, showing beneficiaries reached, product delivered, operation and distribution model, and learning objectives from each project

Overall Goal	Prevent Malnutrition		Treat Malnutrition
State(s)	Karnataka	Bihar	Rajasthan
Beneficiaries (approximately)	35,000 children, adolescent girls and pregnant & lactating women suffering from malnutrition	26,000 children and pregnant & lactating women suffering from malnutrition	10,000 ³ young children suffering from acute malnutrition
Product	Shakthi Vita - porridge blend added vitamins and minerals	Wheatamix – porridge blend added vitamins and minerals	Medical Nutrition Therapy (MNT) kits
Operations and Distribution Model	Karnataka Health Promotion Trust (KHPT), manages the operation of two units and procurement and distribution of the food through the Karnataka Comprehensive Nutrition Mission (KCNM).	Federation of women’s Self-Help Groups owns and operates the two production units. Products are distributed via the Anganwadi centres operated by the Integrated Child Development Services (ICDS).	Screening, delivery of the MNT kits, counseling and monitoring of treatment at the community level (conventionally this is done by admission in clinics).
Learning Objective	<ul style="list-style-type: none"> • Nutritional impact 	<ul style="list-style-type: none"> • Financial sustainability • Women’s empowerment 	<ul style="list-style-type: none"> • Effect of community-based treatment

The BESTSELLER project builds on earlier experiences from 2013 – 2015, where GAIN developed a prototype community-owned decentralized production unit (DPU) for producing fortified blended food and demonstrated operational feasibility through women’s Self-Help Groups in Rajasthan. The 4 units funded by BESTSELLER sought to demonstrate the financial viability of the units, to create evidence of women’s empowerment as well as assessing the nutritional impact of the solution.

Following a scoping mission to Rajasthan, Karnataka, Bihar and Uttar Pradesh, GAIN identified Karnataka and Bihar as the two states with the highest level of government commitment and interest in the project.

GAIN facilitated establishment and operationalization of 4 Decentralised Production Units (DPUs) to produce and distribute a quality-assured Fortified Blended Food (FBF) product to approximately 70,000 targeted beneficiaries. The women factory workers were trained to run their own production units producing a quality blended complementary food product called Wheatamix in Bihar and Shakthi Vita in Karnataka.

The Fortified Blended Food is distributed through the Integrated Child Development Scheme (ICDS). These products are distributed to children of 6 to 36 months and pregnant and lactating women accessing ICDS services.

³ 5,000 supported by the BESTSELLER donation, the rest from other GAIN funds

After the initiation of the BESTSELLER project in 2015, GAIN was approached by the Government of Rajasthan to provide urgent support for children who had been identified to suffer from severe acute malnutrition (SAM). Typically, children with SAM are admitted to clinics for treatment of this life-threatening situation. However, a project had been initiated with a pro-active approach to screen poor communities to identify children with SAM before they were submitted to clinics and have them treated in the communities. This approach has proven in other countries to be very effective, and less costly, making it possible to treat more children with a better result. Unfortunately, many more children were identified to suffer from SAM than anticipated, thus, the government turned to GAIN to ask for support for treatment of the 10,000 children that needed acute treatment. In agreement with BESTSELLER, it was decided to direct part of the funding to contribute to this program.

Karnataka production units

GAIN decided to join the Karnataka Multi-Sectoral Nutrition Pilot Project⁴ which was being initiated but which lacked the possibility to provide a locally produced nutritious product for children, adolescent girls and women. The project was implemented in partnership with Karnataka Health Promotion Trust (KHPT). As per Comprehensive Composite Development Index (CCDI) the project sites are classified as one of the most backward in terms of nutrition and health indicators.

GAIN's role was to ensure local production of "take-home rations" for Fortified Blended Food (FBF) with improved nutritional quality and acceptance of the products by the beneficiaries (children, adolescent girls and pregnant and lactating women).

Two decentralized production units of 2 tons capacity each were built and put into operation in November 2016. The machinery components were procured through a tendering process and equipment was procured from local manufacturers. Standard Operating Procedures (SOPs) were developed for the plant and machinery operations. Raw material for the fortified blends were procured locally using stringent World Bank criteria for sourcing. 25 women have been trained and are employed in running these enterprises which currently are supplying 35,000 beneficiaries. Packaging was designed to comply with government regulations, see picture 2 below which shows packaging and women operating the factory.

The production at the time of closure of the project was stabilized with a potential to increase further to cater to the planned piloting of sale of a similar product under the social marketing strategy. The FBF contributed to the overall objectives of the multisectoral project in achieving the nutrition outcomes.

In table 2, progress in production volumes of the two sites in Karnataka is presented, and in picture 1 progress of the construction site in Chincholi is illustrated.

⁴ A collaboration between the Karnataka Comprehensive Nutrition Mission (KCNM), through the Karnataka State Rural Livelihoods Promotion Society (KSRLPS) with support from the World Bank and the Japan Social Development Fund (JSDF)

Table 2. The average production in the two sites have shown a significant increase measured in tons per month, with each site producing approximately 40 tons per month at project end.

Production Sites	Period (average production per month, tons)		
	2016 Nov-Dec	2017 Jan-Dec	2018 Jan-Jul
Chincholi	11.1	29.6	40.9
Devadurga	2.3	25.1	37.9



Picture 1. Progress on construction of the Chincholi site in Karnataka. Photo to the left is at the start of the renovation in May 2016. On the right is the situation of production, November 2016



Picture 2. Photo to the left shows the product, Shakti Vita. The packaging was designed to comply with government standards. On the right is a picture of the women trained to operate the factory

Real time monitoring data of the government shows improvement in nutritional status of the beneficiaries. A monthly monitoring database was developed by Karnataka Comprehensive Nutrition Mission with critical indicators.

Promising findings were found on child, adolescent and maternal nutritional status. Improvements in adolescent and maternal nutritional status were observed. In addition, the project was successful in training a cadre of village nutrition volunteers and empowering women from the Self-Help Groups with additional knowledge on child and maternal care as well as adequate dietary habits. The preliminary

report from the impact evaluation conducted by the National Institute of Nutrition (NIN) showcased a significant improvement in the nutritional status and overall wellbeing of children and adolescent girls in the Intervention group compared to the control group. Mean haemoglobin was significantly higher in the Intervention group (10.6 gm/dl) compared to the control group (9.9 gm/dl) and anaemia was significantly lower in the intervention group compared to the control group⁵.

During the course of the project, GAIN has been advocating and used evidence to create the basis for the financial viability of the units and for expanding the investment by the state government to invest in more units. The current support for funding of the free distribution of the products came from the World Bank/Japan Social Development Fund. This support is coming to an end in 2018, but GAIN has advocated for the Government of Karnataka to continue the procurement via these units. Looking at the exemplary model, the Government of Karnataka is in the process of replicating this model in 10 more blocks of Karnataka. The current units will be part of the expanded model and integrated.

A social marketing strategy to market similar food products in local communities as well as for institutional delivery has been developed and is being piloted. Picture 3 is an example of a retail version called “Sooperr”. A non-subsidized model will enhance the economic sustainability of the production units and Self-Help Groups.



Picture 3. Retail version of product called Sooperr

Bihar production units

Bihar has a population of 103 million and is the third most populous state in India. About 40% of the population is below the poverty line. The major health and demographic indicators such as infant mortality, maternal mortality ratio, and child malnutrition are higher than the national average. 43.9% of under-five children in Bihar are under-weight, 48.3% stunted, 20.8% wasted and 63.5% of under-fives are anemic. (NFHS: 2015-16).

At present, the Integrated Child Development Services (ICDS) under the Supplementary Nutrition Program (SNP) offers Take-Home Rations (THR) in Bihar to vulnerable populations, which consist of cereals and lentil grains. This has the disadvantage of ending up in the family pot, without any targeted impact on the nutritional status of children. GAIN supported the production of FBF by women’s groups for distribution through the ICDS. These products were distributed to children 6 to 36 months and pregnant and lactating women accessing ICDS services in 2 blocks of Bihar that are under the Bihar Rural Livelihoods Promotion Society (BRLPS).

⁵ Costs for executing the monitoring and evaluation of the Karnataka project was not funded by GAIN/BESTSELLER, but from other funds.

GAIN provided technical and financial support to establish 2 production units, each with an output of 1.5 tons/day, to reach approximately 30,000 beneficiaries. Nidan was the executing agency and BRLPS was a close partner responsible for the SNP in these blocks. Against this backdrop, GAIN equipped women’s SHGs to produce the fortified blended food product.

The outcomes of the project are two-fold: increasing women’s economic empowerment using the SHG model; and increasing the coverage of fortified foods and influencing Infant and Young Child Feeding (IYCF) practices through their distribution.

30 women have been trained and are employed in running these enterprises. The units completed the trial run of operations in September 2017 and began partial production in November 2017. At the time of project closure in July 2018, the units had produced a total of 221.363 tons of FBF between November 2017 to July 2018. Currently the FBF reaches 26,000 beneficiaries on a monthly basis. The average monthly production is shown in table 3 below.

Table 3. The average production in the two sites have shown a significant increase measured in tons per month, with each site producing approximately 40 tons per month at project end.

Production Sites	Period (average production per month, tons)	
	2017 Nov-Dec	2018 Jan-Jul
Mushahari	6.3	15.7
Jhaphah	4.1	12.8

The production volume in Bihar unlike Karnataka is a bit lower due to lower capacity (1 tons/day as compared to 2 tons/day) of the units. The production is still getting stabilized to its full capacity.

Evaluations of the production unit’s performance has proven that these are financially viable, and the solution has the potential to improve the women’s economic empowerment.

Based on 6 months of data available from 2 production units and related assumptions for future months, financial sustainability was demonstrated (see report at Annex 3i). With initial donor funding provided for plant, machinery and working capital, both units started to be profitable within a few months of operation. Raw materials are the main driver of ongoing production costs and procuring materials at a competitive price is therefore extremely important. Better staff and production planning will help reduce the need to hire nightshift workers, whose wages are higher. Revenue, which is based on payment rates determined by the Government of India, was less than initially expected during the period studied due to orders received for lower number of Anganwadi centres compared to initially targeted. The maximum gross profit margin achieved was 24 percent and all profits will be kept within overall operations. Regular orders from ICDS were reported as the key factor in sustaining ongoing financial viability of Bihar production units. Ability to build reserves from profits attained and income diversification going forward will mitigate the risk of possible revenue delays from ICDS. In addition, it was demonstrated that women can manage the production process and other activities related to the

units, after initial technical assistance, training and project management provided by implementing partners.

The evaluation component of the program further comprised an impact evaluation survey in Bihar where this project engaged with the women of JEEVIKA (the Bihar Rural Livelihoods Project). The evaluation was implemented by the Oxford Policy Management Group (OPML) and aimed at (i) assessing the extent to which the intervention contributed to a change in the women's economic empowerment; and (ii) assessing the coverage and determine whether the improved food rations were reaching and consumed by the target population. Findings of this survey were presented at the BESTSELLER M&E Dissemination workshop on October 10th, 2018 at the India Habitat Centre, New Delhi. Approximately 50 participants reviewed the findings and discussed implications and recommendations for future scale-up.

- **(i) Theory based evaluation on women's economic empowerment:** The main conclusions were that the project has helped to increase participating women's self-confidence and self-esteem, and the women enjoyed being able to contribute to the family income. The project thus has the potential to improve women's economic empowerment, but it has not yet resulted in changes in women's participation in household decision-making or their responsibilities for domestic work, most likely due to the short duration of the project and the fact that these habits are deeply engrained in culture.
- **(ii) Fortified Blended Food: Coverage Survey:** Although the product was reaching all the targeted Anganwadi centers, improvements could be made in the distribution and coverage of the fortified food packets. The product was distributed to 58.7% of eligible beneficiaries, and out of the households that received Wheatamix, 77.1% of eligible children actually consumed the product. In addition, there was a preference for traditional THR (dry grains) over the Wheatamix, primarily due to knowledge gaps in how to prepare the Wheatamix.

GAIN has used the positive results related to both economic sustainability and impact on women's empowerment to advocate for scale up of the model. The project was reviewed by the principal secretary, and a proposal for scale up of the model for 200 similar factories has been submitted to the Government of India by the state government. Furthermore, GAIN has received a request from the Government of Bihar to establish at least 10 more such factories. GAIN is currently undertaking activities to secure funding to make this happen.

Rajasthan CMAM project

The Government of Rajasthan (GoR) - under its initiative "Positive and Optimum Care of Children through a Social Household Approach for Nutrition" (POSHAN) had proposed a Community Management of Acute Malnutrition (CMAM) program in 13 districts. GAIN's role in the first phase was to advise the Government of Rajasthan to ensure excellent delivery of CMAM, in terms of capacity building, training, communication, monitoring, and local production, and to inform government budget allocation for scale-up.

Funded by CIFF and BESTSELLER, Phase 1 of Project was implemented in 13 District (10 High Priority and 3 Tribal Districts), through 41 development blocks, 584 Health Sub-centers and 1574 villages. The POSHAN project has had great success, with very high recovery rates for children suffering from severe acute malnutrition, and very low mortality and default rates. About 88% children recovered from severe acute malnutrition between 8-12 weeks of sustained intervention. This recovery rate is better than the yardstick used for good performance and is better than global standards.

An independent validation by national Health Mission Government of Rajasthan, covering 10% of the total enrolled children, after 4 months of follow-up shows that a vast majority of children recovered did not slip back.

Communication and Advocacy

The project advocated for scale up of the DPU / women's SHG model with both the state governments in meetings and multi-stakeholder forums. Inputs were provided to the respective state governments for scale up.

In addition, GAIN disseminated the results of the studies conducted on women's empowerment, coverage and financial viability of the enterprises at a workshop in New Delhi. This workshop was attended by the Ministry of Women and Child Development, development partners, and academia amongst others.

As described above, both the states have plans for scale up. GAIN is recognized as a credible partner and the contribution has been duly acknowledged by the both state governments. Niti Ayog (the Government's think tank that reports to the Prime Minister's office) has asked for the full report of the financial viability. Communications materials are listed in Annex 2.

Key Lessons learnt from evaluation for future scale-up

In addition to the state level findings from the commissioned studies mentioned above, we have drawn several lessons for the approach, its sustainability and potential to scale up. These are presented in table 4 below

Table 4. Key lessons learned from the project which it is important to address to successfully implement the decentralised production units operated by women’s Self-Help Groups.

Key learning conclusion	Elaboration
Adding <u>effective behavioural change interventions</u> is critical to improve the uptake of the supplementary foods and improve dietary habits in general	<ul style="list-style-type: none"> • In Karnataka the largest improvements in nutritional status happened before the introduction of the supplementary food, when behavioural change interventions had already started. • In Bihar behavioural change interventions on how to use the products could improve the distribution and uptake of the improved product from the Anganwadi centres.
<u>Involve men and elderly</u> in communities to improve the perception of mothers/women working outside home in the factories	<ul style="list-style-type: none"> • In Bihar the work in production units improved women’s self-esteem but did not yet result in changes in their household responsibilities • The perception of community members and male household members about women working outside the home was still negative
<u>Remove logistical challenges</u> preventing women from continuing work in factories	<ul style="list-style-type: none"> • Transport and distance to production units limits participation • Improved planning could avoid long and frequent night-shifts
<u>Improve further nutritional quality</u> of the product	<ul style="list-style-type: none"> • Review standards for products for young children 6 to 36 months • Review taste of the product and if this can be improved
Sort out a system to <u>cover initial capital investments</u>	<ul style="list-style-type: none"> • Women’s Self-Help Groups not willing or able to carry the initial capital investments required to set up production units

Further scale of the model and investment to make this happen is of continued attention post project.

Conclusions and reflections

This complementary food product, fortified with vitamins and minerals, reached thousands of women, adolescents, and children in the region. The demonstrated outcomes of the project were increased women’s economic empowerment using the self-help group (SHG) model; and increased coverage of fortified foods and influence on infant and young child feeding (IYCF) practices through distribution. The Decentralized Production Unit (DPU) model is well aligned to government policy and the directives from the top court. The intervention provides a better-quality product and helps more rapid reduction in malnutrition of the target population while empowering of women’s SHG members

GAIN has also demonstrated the financial sustainability of the production units. With initial donor funding provided for plant, machinery and working capital, both units have started to be profitable within a few months of operations. They have been able to fulfil all ICDS orders within the period studied, cover necessary costs and earn profits. After initial technical assistance, training and project management provided to self-help groups by implementing partners, women can manage the production process and other activities related to the units. Further guidance will be required with navigating the government systems in cases when ICDS orders are delayed. Regular orders from ICDS are the key factor in sustaining

ongoing financial viability. Different sets of conditions have been studied including an option for setting up a new production unit without donor funding available based on the data from the production units in Bihar. Several factors would have to be considered in such a case from the operational and not just the financial perspective. Initial delays must be anticipated with obtaining relevant licenses, agreements with land owners and infrastructure set up. Renovations generally take longer compared to building a new customized production unit. Time of the year needs to be considered when commissioning such units to avoid the risk of being affected by adverse weather conditions.

This initiative has shown that it is a challenge to have a model which is dependent on subsidised distribution with often instable ordering patterns. However, the need for continued public distribution to the millions of Indians who are food and nutrition insecure, is unfortunately not likely to be solved in the short- to mid-term. The need for this model will continue for the coming decades. The case of extra development effect by using the Decentralised Production Units and leveraging Women's Self-Help Groups has been strongly proven by the GAIN-BESTSELLER project, and GAIN will continue to advocate for further scale up and leverage the increased interest from the central government, the various Indian states and international organizations and donors.

Table of Annexes:

Included in main report document

Financial overview	Annex 01	Overview of final spend report against budget
Communication material	Annex 02	Overview of photos and videos developed during the project – with links to material

Attached as zip file, called: 00_Final report_Annex 2 communication (12 MB)

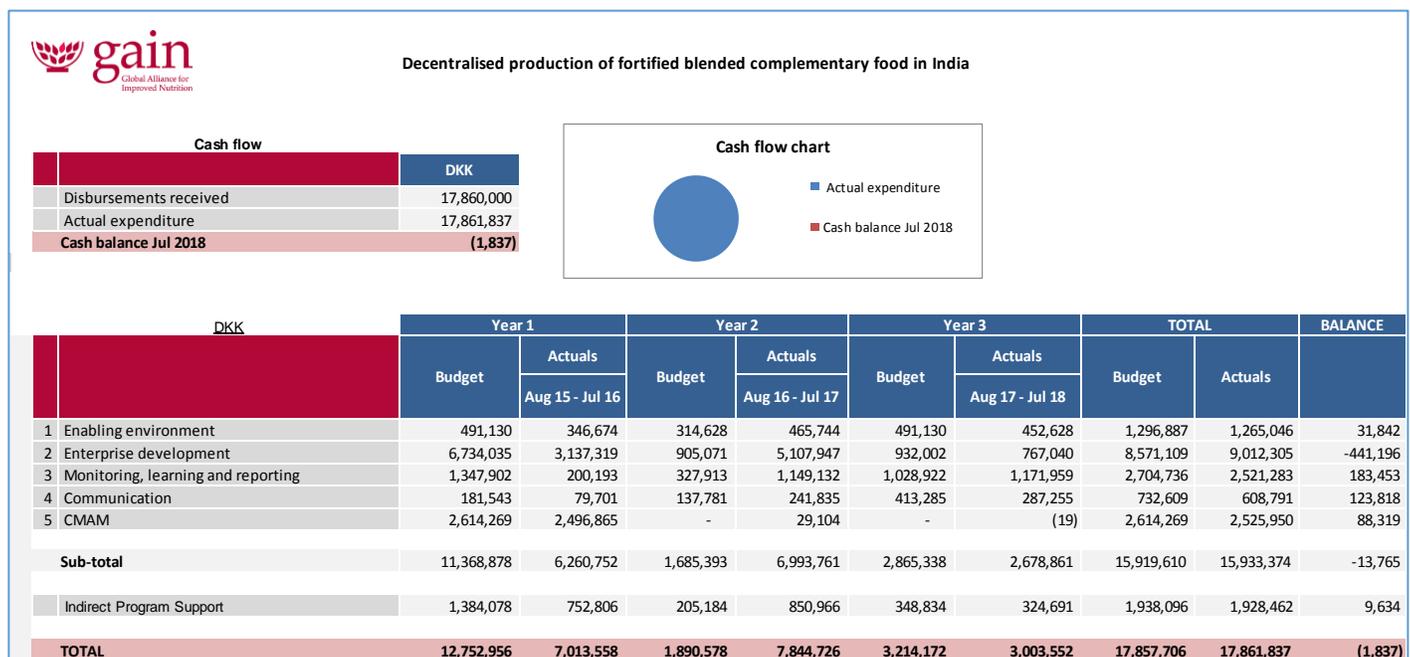
Communication material	Annex 02a	Financial Sustainability Factsheet_(Bihar)
	Annex 02b	Women Empowerment Factsheet_(Bihar)
	Annex 02c	Bestseller Project Brief_CM

Attached as zip file, called: 00_Final report_Annex 3 monitoring and evaluation (13 MB)

Monitoring and evaluation	Annex 03	Preliminary Report NIN_M&E (Karnataka)
	Annex 03a	Project Findings_Outcomes and Insights_M&E
	Annex 03b	General group analysis_M&E (Karnataka)
	Annex 03c	Cohort group analysis_M&E (Karnataka)
	Annex 03d	Lessons Learnt_M&E
	Annex 03e	Theory Based Evaluation_Endline Report_Final_M&E (Bihar)
	Annex 03f	Theory Based Evaluation_PPT_M&E (Bihar)
	Annex 03g	Coverage Survey Report_Final_M&E (Bihar)
	Annex 03h	Coverage Survey_PPT_M&E (Bihar)
	Annex 03i	Financial Sustainability Evaluation Report_Final_M&E (Bihar)

Annex 01: Financial Overview

Final spend report against budget.



- GAIN has achieved full spend against the project budget totalling DKK 17,861,837.
- Highest expenditure was seen in the Enterprise development component at DKK 9,012,305, overachieving component budget by 5% which reflects the nature of this project.
- Budget savings in other components were utilized in the Enterprise development. Site improvements of the units in Bihar and establishing laboratories in the Karnataka units have also been covered by the savings. In addition, the contract with the implementing partner Nidan included deliverables relating to monitoring such as supervision, quality control and consolidation of monitoring data according to the M&E framework as well as assisting OPM with the coverage survey but has been fully accounted under Enterprise development.
- Final payments were made against contracts with partners in Karnataka and Bihar (KHPT and Nidan) as well as OPM for end line qualitative and coverage reports.
- Costs relating to the BESTSELLER Foundation visit and final project dissemination which took place in October have been accrued in the accounts and included in the reported figures.

Annex 02: Communication Material (Also see Annex 2(a), 2(b), 2(c))

During the project extensive communication material has been developed.

On Flickr [Photo streams](#) can be accessed for the two production units:

	Karnataka: https://www.flickr.com/photos/141487971@N04/albums/with/72157679088904595
	Bihar: https://www.flickr.com/photos/149013321@N04/with/32970548464/

A series of YouTube videos are available: **BIHAR**

Solution overview 5:23 min	BESTSELLER - GAIN Project: The Winds of Change https://www.youtube.com/watch?v=ApNfh8oRK6s&t=20s Elaborates on the change in women’s nutritional status and livelihood, subsequent to the intervention of setting up two production units, located in Muzzafarpur district, Bihar. These production units are owned, managed and operated by cluster-level federations (CLFs), which are federations of women’s Self-Help Groups. They produce a fortified blended food product called Wheatamix for the Anganwadi centers operated by the Integrated Child Development Services (ICDS). The video is about the first-hand experiences of women who were encouraged to set up and run these production units and how this inspired the women workers to take control over their own lives, set their own agendas, acquire skills, solve problems, take decisions and cherish self-dependence.
Empowerment & entrepreneurship 3:25 min	BESTSELLER - GAIN Project: The Spirit of Entrepreneurship https://www.youtube.com/watch?v=q41BGhemA28 This video elucidates on the fact that even a shy, silent and unaware rural woman can realize the dream of being an entrepreneur. The video describes a unique, self-sustaining manufacturing business model that has been implemented in two blocks of Bihar. It is about setting up the two production units, located in Muzzafarpur district, Bihar, owned and operated by cluster-level federations (CLFs), which are federations of women’s Self-Help Groups. With a production capacity of about 1 ton/unit/day, these production units are operated only by women; from procurement, loading, manufacturing, process monitoring, packaging, labelling, dispatching, and even distribution to the beneficiaries, everything is managed by women.

KARNATAKA

<p>Problem and solution 3:34 min</p>	<p>Coming Together for a Healthier Tomorrow https://www.youtube.com/watch?v=p8b-1CSsETA GAIN with the help of its implementing partner KHPT, worked in close coordination with the Departments of Health & Family Welfare, Women & Child Development, Agriculture, Horticulture, Rural Development and Panchayat Raj, Education, Rural Water Supply & Sanitation and Social Forestry, particularly at the Block and District levels to be able to bring effectiveness at three levels of effort i.e. systems, community and the provider.</p>
<p>Solution overview 3:31 min</p>	<p>Innovative Solutions for Nutritional Needs https://www.youtube.com/watch?v=CcMr59wgU8A Innovative Solutions for Nutritional Needs is about a unique, self-sustaining manufacturing business model that has been implemented in two most backward blocks of Northern Karnataka. With a production capacity of about 2tons/unit/day these production units cater to the needs of undernourished and impoverished children, adolescent girls, pregnant and lactating women. The fortified blended food is formulated to provide 1/3rd of the macronutrients and half of the micronutrient requirement of a day. A one-of-a-kind facility operated only by women through the supply chain stages: from procurement, loading, manufacturing, process monitoring, packaging, labelling, dispatching, and even distribution to the beneficiaries.</p>
<p>Village Nutrition Volunteers 3:32 min</p>	<p>The Beacons of Light https://www.youtube.com/watch?v=CcMr59wgU8A Village Nutrition Volunteers (VNVs): The Beacons of Light elaborates on the efforts done by the field workers who act as key resource personnel, recruited from within the community to oversee project activities. The activities range from data collection, food distribution, behavior change counselling at individual and household level, bringing convergence among various departments and monthly monitoring. The women volunteers play an important role in spreading awareness about the benefits of consuming the Fortified Blended Food and counselling families on the causes and effects of poor hygiene and sanitation in relation to eating and feeding practices.</p>
<p>Empowerment 3:51 min</p>	<p>Empowering Souls. Enriching Lives https://www.youtube.com/watch?v=p2Jz7KRpe28 Helping women achieve self-reliance and gender equity has been the guiding principle here. The dimensions of empowerment foreseen are: economical, socio-cultural, interpersonal/familial and psychological. To promote financial independence among women, women's Self-Help Groups (SHGs) were encouraged to set up production units that produce Fortified Blended Food, by the women, for the women and children. This inspired them to take control over their own lives, set their own agendas, acquire skills, solve problems, take decisions and cherish self-dependence.</p>

<p>Gender focus 5:02 min</p>	<p>Building Healthier Communities https://www.youtube.com/watch?v=ZhvVTYp-1PA Describes the fact that adequate nutrition is the cornerstone for good health. In order to meet the special nutritional needs of children, adolescents and women, GAIN along with KHPT and Government of Karnataka through this project aims at reducing undernutrition among the target populations through multi-sectoral and inter-generational approaches in two backward blocks of Karnataka- Chincholi and Devadurga blocks in Kalaburagi and Raichur districts. The strategies employed included: engage, empower and innovate. The aim is to alleviate undernutrition through scalable and sustainable nutrition-sensitive and nutrition-specific interventions</p>
<p>Integrated approach 4:50 min</p>	<p>Light in Hidden Darkness https://www.youtube.com/watch?v=qIRP303OJ_E The video demonstrates integrated nutrition interventions of the <u>World Bank</u> supported Karnataka Multi-Sectoral Nutrition Project being piloted by the Karnataka Comprehensive Nutrition Mission (Government of Karnataka) and Global Alliance for Improved Nutrition (GAIN) with <u>KHPT</u> as implementing partner, in Devadurga block in Raichur district and Chincholi block in Gulbarga district (two of the most backward blocks of Karnataka). The interventions included establishment and operationalization of production units that will produce and supply a quality assured Fortified Blended Food (FBF) product to approximately 40,000 beneficiaries in these 2 selected blocks and distribution of FBF by Village Nutrition Volunteers (VNVs) to vulnerable households within their communities. In addition to distribution of FBF, the local VNVs also play an important role in counselling families on the causes and effects of poor hygiene and sanitation in relation to eating and feeding practices, in addition to educating about the benefits of healthy diets.</p>

Digital presence:

<https://www.governancenow.com/views/columns/how-put-india-on-course-fight-malnutrition>

<https://www.deccanherald.com/content/626158/indicators-malnutrition-kids-worsening.html>

<https://www.newslaundry.com/2018/06/25/childhoodmatters-episode-15-karnatakas-multi-sectoral-nutrition-project-more-than-just-nutrition>

<https://www.newslaundry.com/2018/06/28/childhoodmatters-episode-16-data-is-not-just-something-in-the-computer-it-is-a-human-thing-veena-s-rao>

<https://www.gainhealth.org/knowledge-centre/celebrating-women-empowerment-india/>