Summer Training at
Public Health Foundation of India, Gurgugram, Haryana
(April 3 to June 2, 2017)

Formative Research and Development of Behaviour Change Intervention Strategy for Double Fortified Salt in the selected District of Madhya Pradesh

By
Aditya Verma

Under the guidance of
Dr. Susmit Jain

MBA Hospital & Health Management
2016-2018

Institute of Health Management Research
The IIHMR University, Jaipur
2017

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Mr. Aditya Verma** has undergone summer training in **Public Health foundation of India, Gurugram (Haryana) from 03 April 2017 to 02 June 2017.**

The candidate himself completed the project assign to him during summer training. His approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health Management.

I wish him success in all his future endeavors.

Dr. Ashok Kaushik

Dean (Academic & Students Affairs)

The IIHMR University, Jaipur

Dr. Susmit Jain

Assistant Professor & Mentor

The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

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02 June 2017

To whomsoever it may concern

This is to certify that Mr Aditya Verma has successfully completed his Internship from 03 April 2017 to 02 June 2017 with Public Health Foundation of India (PHFI). During his internship period, he worked with the "Policy & Research/ Formative Research on DFS and developing BCC startegy" project.

During the period of his internship programme with us he was found to be hardworking and sincere.

We wish him the very best in all his future endeavours.

For **Public Health Foundation of India**

Working towards a healthier India

Aparajita Roy
Director – Human Resources

Acknowledgement

I would like to thank Ms. Aparajita Roy (Director- Human Resource, PHFI) & Ms. Nirmala Mishra (Senior Program Manager, PHFI) and Ms. Anupama Sharma (Consultant- Research & Evaluation, PHFI) who in spite of busy schedule has co-operated with me continuously and indeed, his valuable contribution and guidance have been certainly indispensable for my project work.

I am thankful to Ms. Sukriti Singh (Human Resource, PHFI) for giving me the opportunity to work with PHFI and to learn.

I would also like to thank and express my deep sense of gratitude to Mr. Col. Ashok Kaushik (Dean Academic & Student Affairs, IIHMR) and my faculty mentor Mr. Susmit Jain(Assistant Professor, IIHMR). I am greatly indebted to both of them for providing their valuable guidance at all stages of the study, their advice, constructive suggestions, positive and supportive attitude and continuous encouragement, without which it would have not been possible to complete the project. I am also thankful to Ms. Preeti Chaudhary (Academic Executive, IIHMR) who provided me the opportunity to work in the PHFI.

I owe my wholehearted thanks and appreciation to the entire staff of the organization for their cooperation and assistance during the course of my project.

I hope that I can build upon the experience and knowledge that I have gained and make a valuable contribution towards this organization in coming future.

Aditya Verma(0373)

IIHMR University

Jaipur, Rajasthan

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Acronyms/Abbreviations

APL- Above Poverty Line

BCC- Behaviour Change Communication

BCI- Behavior Change Intervention

BMGF- Bills & Melinda Gates Foundation

BPL- Below Poverty Line

DFS- Double Fortified Salt

FCRA-Foreign Contribution Regulation Act

FGD- Focused Group Discussion

FSO- Food Safety Officer

IDI- In-Depth Interview

IPC –Infection and Prevention Control

ITSU- Immunization Technical Support Unit

MoHFW- Ministry of Health & Family Welfare

PDS- Public Distribution System

SACS- State AIDS Prevention and Control Societies

PHFI- Public Health Foundation of India

MD NHM- Mission Director National Health Mission

NACP- National AIDS Control Programme

UNICEF- United Nation Children's Fund

Organizational Learning

1.1 Introduction

About the Organization

Public Health Foundation of India (PHFI) is an autonomous Public-Private Partnership (PPP), launched in 2006 by the Prime Minister, in a response to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health. PHFI is governed by a fully empowered, independent Governing Body (with the General Body comprising all the sectors of the society) and Mr. Narayan Murthy (Chairman, Infosys) as Chairman. As a public-private initiative, PHFI is in a unique position to encourage partnerships across the government, private sector, and civil society. PHFI has relationships with the highest-level policymakers in the country; it was selected by the Planning Commission to serve as the secretariat to provide technical support to the High Level Expert Group on Universal Health Coverage to incorporate health issues into the Twelfth Five Year Plan. It has the task of reviewing India's health sector and proposing a 10-year strategy for the path ahead. It also supports the National Aids Control Organization (NACO) and SACS in six high prevalence states to scale up prevention under NACP III and facilitate transition of the Bill & Melinda Gates Foundation's (BMGF) Avahan Initiative to the government.

PHFI is an autonomously governed public private initiative registered as a Society under the Societies Registration Act 1860. Under the governance structure adopted by the Society, the Foundation is governed by a fully empowered, independent, General Body (comprising of all the members of the Society) that has representatives from multiple constituencies - government, Indian and international academia and scientific community, civil society and private sector.

Vision, Mission and Values

Vision	**Vision of PHFI is to strengthen India's public health institutional and systems capability and provide knowledge to achieve better**

	health outcomes for all
Mission	Mission of PHFI is developing the public health workforce and setting standards Advancing public health research and technology Strengthening knowledge application and evidence-informed public health practice and policy
Values	**Transparency** - Uphold the trust of our multiple stakeholders and supporters - Honest, open and ethical in all we do, acting always with integrity **Impact** - Link efforts to improving public health outcomes, knowledge to action - Responsive to existing and emerging public health priorities **Informed** - Knowledge based, evidence driven approach in all we do - Drawing on diverse and multi-disciplinary expertise, open to innovative approaches

At the time of launch in 2006, PHFI had set out its Charter focused on building institutional capacity in India for strengthening education, training, research and policy development in the area of Public Health. The Charter goals are: establishing new institutes of public health, assisting existing institutes to enhance their capacity and output, promoting research in prioritised areas of public health to inform policy and empower programmes, facilitating policy development, programme evaluation, and advocacy on public health related issues, and enabling the setting of standards in public health education. The Vision and Mission statements of PHFI was adopted in 2012 along with the Values statement.

1.2 Mode of Data Collection for Organizational Learning

Tool or mode of data collection was face to face interviewing **(Paper-and-pencil personal interviewing (PAPI))** of the authorities/heads of the various departments such as Finance Department, HR Department, Technical Department. Also Data collection about the functioning, limitations of working of the various Departments was done through observational and exploratory learning of the departments in the entire duration of the Summer Internship. Interaction with the employees/staff of the organization and evaluation

of their working culture provided with more knowledge of their work, limitations and suggestions that can improve their Quality of Work.

Tool used: Questionnaire (Department-wise/Programme wise questionnaire)

1.3 DEPARTMENTAL INFORMATION

HR Department

Human resource management in PHFI functions by application of management principles to management of people in an organization. HRM here includes various management functions like recruitment, wage/ salary administration, labor welfare, promotions. It also includes labor budget and forecasting. Human Resource Management also functions by bringing people in the organization together so that the goals of each are met. This means focused human resources planning, recruitment, selection, placement, performance appraisal, compensation administration, incentives, employee benefits, social security, industrial, employee grievances, collective bargaining, personnel records and many other fields directly or indirectly handled by the HR department. Overall the HR practices are fairly good in Public Health Foundation of India.

Total number of Research Department in PHFI Faculty (2015-2017)

Department-wise / Program wise	**PHFI Faculty (2015-2017)**	
	M	**F**
Research Department	30	70
Total	30	70
Sum of Male + Female	100	

In PHFI, female ratio is higher than the male because they have strong analytical approach to solve the problems than the male.

- There is Grievance Redressal Mechanism for gender related issues and all the academic matters within the organization

- Women special facilities include Women security arrangements and Public Conveniences for women within the organization.

Finance Department

Finance Department is responsible for management of organization cash-flow. It is involved in making all the strategic decisions. The functioning of the all the other departments is linked with the finance departments as it generate funds for all the requirements of the organization. The Finance department work with managers of other departments to prepare the organization's budgets and forecasts for projects, and to report back on the progress against these throughout the year. This information is used to plan staffing levels, asset purchases and expansions and cash needs, before they become necessary.

As per the information gathered from finance department (Appendix A) Income and Expenditure of the three years is

Financial Information, PHFI			
	2013-14	**2014-15**	**2015-16**
Income	**1,846,337,760**	**1,96,53,38,501**	**2,097,687,063**
Expenditure	**1,877,010,010**	**2,14,03,30,711**	**2,146,116,373**

Technical Department

To augment its ongoing efforts around immunization, the Ministry of Health and Family Welfare (MoHFW), Government of India and the Public Health Foundation of India (PHFI) establish an Immunization Technical Support Unit (ITSU) in collaboration with other partners.

ITSU provides support for improving immunization coverage by appraising performance across all states, reviewing the existing central and state governmental processes, and formulating innovative, evidence based practices and strategies. This includes:

- Augmenting and strengthening capacity of the health workforce to deliver routine immunization through organizing learning events and developing capacity building programmes.

- Supporting evidence-based decision making by developing approaches, tools such as HERMES (Highly Extensible Resource for Modeling Event-driven Simulations) and data analytics including computer simulation model.

According to the information collected from Technical Department as per Appendix A it was seen that

- PHFI is involved in training and educating their Employees according to the requirement. They also actively participate and organize Healthcare Awareness Campaigns.
- Their area of providing operations and services in rural and urban areas.
- PHFI has its branches on a National level and International Levels.
- They have a consultation process for their Employees as well as for companies.
- There are 5 members in the Governing Board of the organization who are highly educated and qualified. These include Mr. N. R. Narayana Murthy, Dr. Montek Singh Ahluwalia, Prof. K. Vijay Raghavan, Mr. Harpal Singh, Mr. J. V. R. Prasada Rao.

Functional Division of PHFI

Health Promotion Division

The Division, one of the technical units within Public Health Foundation of India (PHFI) is a collaborator on this project. The Division, which is constituted by multi-disciplinary personnel, has undertaken several multidisciplinary research studies, impact assessment and Rapid Programme review of several health policies and programmes. The Division undertakes communication, networking, and community outreach activities that integrate health promotion policy and practice in efforts to strengthen health systems. The Division's interventions have a firm theoretical foundation and are set in diverse contexts to generate evidence for effective policymaking.

Public Health Training at PHFI

The Training Division at PHFI was established in 2008 with the goal of meeting the short term training needs of public health practitioners and professionals of the health and allied sectors in India. It has, since then, conducted several training programs customized to the identified needs of health service personnel of different states, young health researchers, physicians in practice and national health program managers and consultants.

Factors affecting functioning of Department

Structure of Department-The organization structure of the HR department in the organization should comprise of the Director as head, HR manager, Assistant Managers and a number of HR executives looking after recruitment; training; safety, security, general administration, labor, vigilance, government regulations and legal issues.

The HR department needs to be an integral part of the top management of these health care facilities so that HRM inputs and support for attaining the mission and vision of the organization are available at the highest levels.

- Economics- Economics affects the functioning of the departments too. As observed from the financial Data that the expenditure occurred consecutively in the past three years by the organization exceeds than the revenue occurred. So economy is big factor that is affecting the Functioning the various departments
- Size of the staff-There is requirement of more number of skilled workforce (female employees) because ratio of male/female in the organization was uneven.
- Coordination-The organization needs greater coordination among Departments to work effectively for the attainment of their goal.

Section -4

1.4 Conclusive Learning, Limitations & Suggestions

I was involved in various learning process during my internship time period at PHFI. For example-Fear of Talking to Strangers, Learning different Cultures, Thinking like a Pro, Time Management, and Respecting the Freedom. During internship period, I faced lack of interest

between the people while collecting the information regarding my questionnaire. The possible reason for this behavior was because of the FCRA issue that happened recently with PHFI.

Suggestion for PHFI from my side to empower the strength of women in their faculty members so that they will equally involve & participate in the organization

Project Report

A research study on "Formative Research and Development of Behaviour Change Intervention Strategy for Double Fortified Salt in the selected District of Madhya Pradesh"

2.1 Introduction

Government of MP has requested MI to support in rolling out the DFS program; therefore, MI has selected 5 districts namely Jhabua, Alirajpur, Barwani, Dhar and Khargone to extend support where almost all blocks are tribal and anemia is also high. To facilitate the implementation of DFS, MI will provide technical assistance to the Government of MP and also will hire an implementing NGO partner which will (a) provide trainings to division and district level health and civil supplies officials to build their capacities on forecasting, supply chain management, monitoring, reporting of the DFS intervention through MIS (b) set up procurement and internal/ external QA/QC mechanisms to ensure quality of DFS. MI will also implement a behaviour change intervention (BCI) strategy and activities to make the community aware of benefits of DFS for its increased usage.

In this context PHFI conducted formative research to develop a behavior change intervention strategy. The study was conducted in 4 selected tribal districts of Indore division of Madhya Pradesh namely ***Dhar, Alirajpur, Barwani and Khargone. District Meerut*** as DFS implemented district of UP was also selected under the study

Rationale

To assess behaviour of consumers/ vendors through qualitative research and identify key barriers and enablers for behaviour change related to consumption of DFS. The findings from this study will feed into the development of a BCI strategy and prototype materials aimed at converting use of iodized salt to Double Fortified Salt.

Research Questions

- What is the level of awareness on issues such as anaemia (causes, symptoms, adverse effects, prevention etc.) for women and children?
- What are the perceptions and attitudes related to iodised and double fortified salt?

- What are the current practices and services accessed related to anaemia and iodised salt?
- Where do Tribal people access/purchase their salt currently?

Objective and Scope of Methodology

The specific objectives of the study are as follows:

1. To review and analyse available formative research, other qualitative and quantitative evidence and prioritise key behaviours related to DFS to help guide interventions for behaviour change.
2. To understand existing communication interventions and available materials on DFS aimed at improving the anaemia status of the target groups and identify gaps and areas for improvement. To develop effective communication strategies that address barriers and utilise enabling factors to improve uptake of DFS and trigger changes in behaviour among intended audiences.
3. To obtain inputs from key stakeholders for developing a robust communication campaign and BCI strategy and implementation plan through a participatory process.

Research Methodology

The study was guided by behaviour change theory and social marketing approach to assess the behaviours and develop a CBI strategy. The concept is based on understanding the community needs, market structure and providing micronutrients to improve the health status while bringing awareness and inducing demand for nutrients.

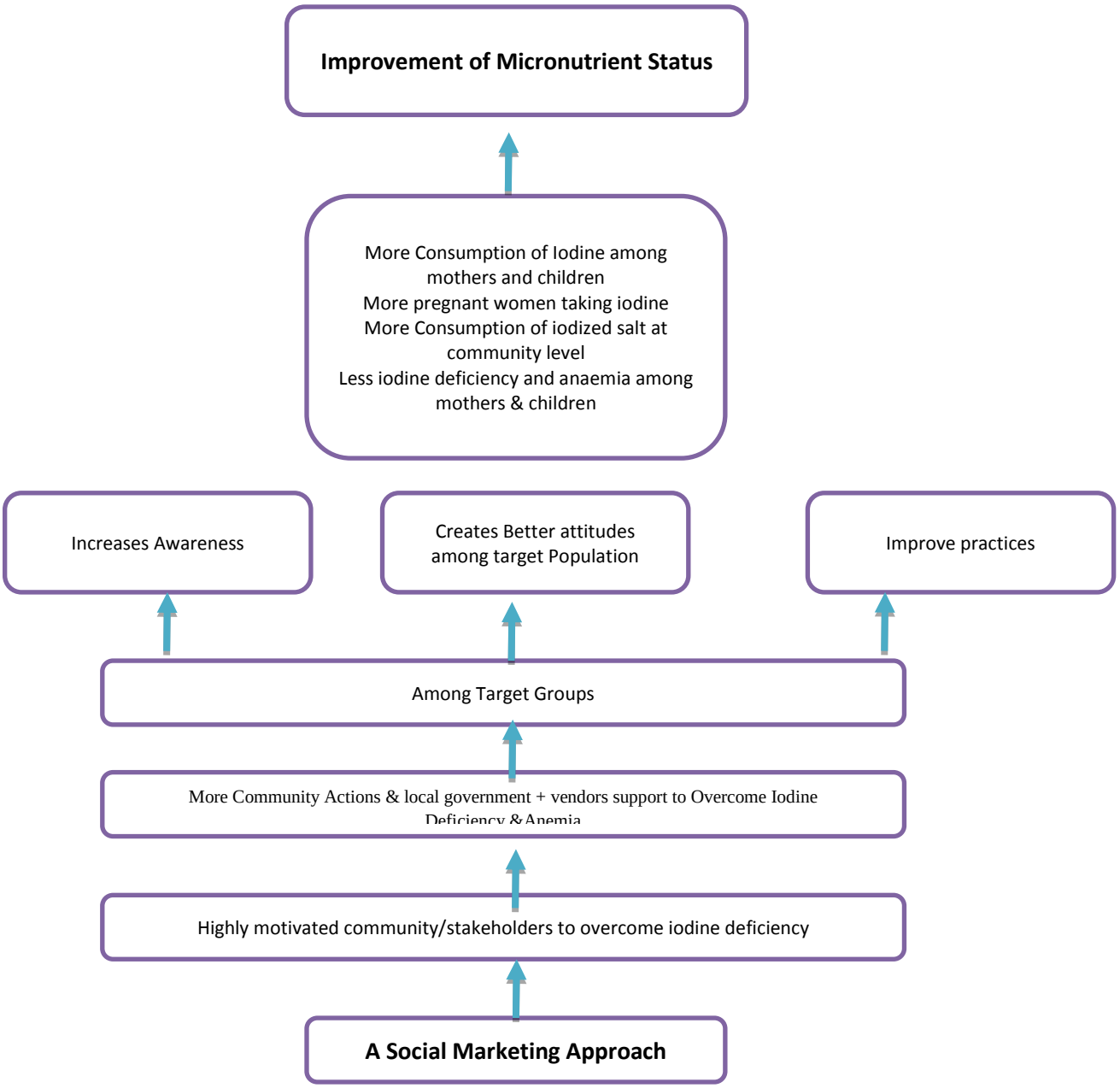

Figure-1 (A social Marketing Approach)

Various methods used for different objectives:-

Objective 1: Desk Review

Objective 2: Cross sectional study

Objective 3: Desk review and FGD

Objective 4: In depth Interview

Sample: 7-10, FGD done in selected tribal district in Madhya Pradesh

Study Setting: Alirajpur, Dhar, Khargone, barwani

Study Tool & Techniques: Verbal Questions, DVR, FGD and IDI used to collect inputs from stakeholder and non- lactating women to prepare behaviour communication strategy

Population Study: Non- lactating women, Non- Pregnant(6 BPL & 6 APL), Warehouse Manager(1), Block Manager(1), District Officials(1) from selected tribal district of Madhya Pradesh which includes Dhar, Alirajpur, Khargone, Barwani.

Study Design: Qualitative in nature

Study Design:

The qualitative study is designed on ecological framework about awareness, perception, attitudes and current practices related to anaemia and consumption of iodised salt among women and households, while analysing the market accessibility and supply chain to influence demand for DFS(figure below)

Societal factors: Tradition, cultural beliefs, attitudes and practices towards DFS
Desk review: studies on social marketing for micronutrients, PDS policies;
IDI: PDS shop owners, FSOs (district), Quality food inspectors (district), DC
FGDs: Women, husbands, mother-in-law, staff of implementing partner, religious leaders, Sarpanch

Market Factors: Supply Chain, Accessibility, Procurement and local PDS system
IDI : DC, Warehouse manager, officials from Comptroller of Food & Drug, Commissioner Supply, MD state and civil supplies, MD NHM, DD Child health &nutrition, DD maternal health, development partners

Program Management: Key Barriers, role of stakeholders, communication used by stakeholders for IPC, M&E practices implemented on ground
IDI: MD NHM, DD Child health &nutrition, DD maternal health, development partners (UNICEF)

Figure -2 A Study Design

Sample size

Table: Sample size for Formative research

S.No.	Target Respondents	Alirajpur	Dhar	Khargone	Barwani	Jhabua*	State
		Focussed Group Discussions(FGD)					
1	Non-pregnant, non-lactating women (6BPL and 6APL groups)	2	3	3	2	2	
2	Husbands of women in reproductive age group (2BPL and 2APL)	1	1	1	1	1	
3	Mothers-in-law/heads of households (2BPL and 2APL)	1	1	1	1	1	
4	Staff of implementing partner						1
		In-depth Interviews(IDIs)					
5	PDS shop owners	3	3	3	3	3	
6	FSOs (district)	1	1	1	1	1	
7	Quality Food Inspectors(district)	1	1	1	1	1	
8	Religious leaders	1	1	1	1	1	
9	Sarpanch	1	1	1	1	1	
10	District Collector	1	1	1	1	1	
11	Warehouse Manager (district)	1		1			
12	Godown In charge(block)	1		1			
13	Comptroller-Food & Drugs Administration						1
14	Commissioner- Food & Civil Supplies						1

15	MD State Civil Supplies						1
16	MD NHM						1
17	Health Commissioner						1
18	DD, Child Health & Nutrition						1
19	DD, maternal Health						1
20	(UNICEF) Development Partner						1
	Sample size to Pre-test of the communication Prototype						
S.No.	**Target Respondents**	**Any one neighbouring district in consultation with MI**					**State**
Focussed Group Discussions(FGD)							
1	Non-pregnant, non-lactating women	2(1 APL and 1 BPL group)					
2	Husbands of women in reproductive age group	2(1 APL and 1 BPL group)					
3	Mothers-in-law/heads of households	2(1 APL and 1 BPL group)					
4	Staff of implementing partner						1

The RFP states that the formative research conducted in 5 districts whereas in sample size only 4 districts are mentioned. Hence included Jhabua which was missing in sample size

Section- 2

2.2 <u>Mode of Data Collection Method</u>

After training and selection of RAs, a detailed plan which explains the teams' field movement was developed and shared with MI so that they can plan their travel in case it wants to make on-field observations/monitoring etc. A periodic status report was also be shared with MI as per the RFP.

During a visit team was constitute with **2RA and 2 senior team members (**from Delhi) **each**. Team was spent 7-10 days to complete the IDI s and FGDs of different stakeholders.

Filed level and beneficiaries covered by RAs while Senior level, State and District level interviews was conducted by Sr. team members and experts.

Pretesting and finalisation of Communication Prototype

Analysis of the formative research was used to address the local needs and context. It helped to design a BCI strategy taking into consideration following issues to reach the target groups:

- Existing behaviours,
- prioritizing the key behaviours,
- identifying the audience segments,
- Motivations ,
- Barriers and enablers.

BCC expert with other team members develop the draft of the BCI strategy. This was followed with a one day consultative workshop to receive the inputs and comments of the relevant stakeholders to finalise draft strategy document.

To conduct the consultative meeting with respective stakeholders' two experts/ Sr. team members visited to State. Programme Manager and RAs provided support for the meeting.

Based on the recommendations from the consultative meeting/ workshop and in consultation with MI, a communication campaign and set of communication materials in line with overall strategic approach including key messages identified was developed. The prototype of the communication material was pretested. A team of two experts/ sr. team members visited to districts with RAs to pretest the communication prototype. FGDs was conducted with target group and implementing agency to pretest the prototype. This took 4-5 days of field work to conduct approximately 7-10 FGDs till we reach the saturation.

In consultation and inputs from MI team pre tested prototype materials was finalised keeping in mind the potential of audience segments.

Post finalisation of the communication materials, PHFI developed a training module and conduct a training of trainers with the implementing agency/teams. The training focused on effective use of the communication materials and roll out of the BCI strategy. Within this, the implementing agency/teams also oriented on the basics of behaviour change communication.

Section-3

2.3 Data Analysis

The qualitative data analysis included the following steps:

Step 1: Content analysis formats developed as per the discussion guides in order to categories responses to understand similarities and dissimilarities of stated facts. Information from transcriptions put into the content analysis format. At the end of each group discussion/interview, extensive notes made.

Step 2: Analysis of qualitative information done by the researchers using the content analysis sheets, as well as the notes prepared by the moderator while conducting the in-depth interviews. The researcher in charge of the study studied each notes in detail, to ensure that all issues discussed & covered and that there are no gaps.

Atlas Ti /NVivo-7/ software used to carry out the qualitative data analysis

Findings

Based on the formative research findings, the agency developed a BCI strategy and prototype materials aimed at converting use of iodized salt to Double Fortified Salt.

Diet Patterns

On questions pertaining to diet, it was found that corn bread and lentils (*tour and moong dal*) is a staple food, consumed in every household. Intake of vegetables is largely depend on season, household access to water which is linked to socio-economic status of village. Village having low access to water was found to consume less amount of vegetables, particularly if households are from BPL or low income group. Some villages also cook rice

and wheat bread is often part of the meal. It was also hinted during FGD's and IDI's that villagers also consume meat and poultry product

Access to Media and Mobile

Availability of TV varies across the villages, it largely depends on the socio-economic status of household. In Barwani, few respondents from study villages reported having access to TV while in other districts, mostly reported having TV at home, except villages of bhavra block in Alirajpur. Although having TV doesn't mean that women, men and elderly will watch TV regularly. Watching TV shows is directly found linked with age of respondents. Younger women and men are more likely to watch TV than older generation.

All study respondents stated having one or more than one mobile phone at household level. This was found irrespective of age, gender and socio-economic status. Number of members within the household varies across the villages and so is the number of mobile phone. It was found that one mobile is used by multiple members of the household, although usage was found less among women as compared to men.

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With respect to means of entertainment, many villages has no means except TV in some places or weekly market. Hence, most men and women resort to gathering, chit-chatting at chaupals or at local retailer shops. Women do gather at local religious events such as during Navratra or Satsang. Some villages did reported local theatrical shows, folks once a year. Bhagoria is the most famous festival of the tribal districts and during this occasion lot of meeting, greeting happens. While inquiring about the source for getting information on agriculture and other areas, most of the respondents stated markets, newspaper, talking to friends & neighbours. Only few suggested TV as one of the source.

Purchase and Consumption of Salt

Most of the villagers consume salt supplied by PDS/FPS and locally available packed salt which is generally iodised. However majority lacks awareness about benefits of iodised salt or the reason behind adding iodine to salt, still many respondents perceive iodised salt is a

good salt. The awareness level was found much better among PDS owners, mostly were about goiter disease. PDS owner stated the reason of low awareness level is due to not enough efforts undertaken by government to address this issue

Majority of the families purchase from PDS as well as from local retail (kirana) shop to meet the needs of the family. However, choice to purchase is limited with consumer, villagers are forced to buy which ever brand is either given by local shopkeeper or brand available at that particular moment.

Perception on Quality of Salt

Responses about the quality or goodness of salt was generally around PDS supplied salt or iodine based salt. Both are considered good. Few of the women in some village did responded the flow of salt, sourness of salt as indicators of quality.

In response to DFS sample, majority of the respondents found it more sour (teekha) than normal salt they consume whether it is PDS or local kirana salt. Few find it similar to what currently PDS is supplying in taste

Current Supply Chain

Storage issues at PDS were highlighted during discussion due to non-availability of space or poor infrastructure which doesn't provide appropriate environment for the stocks to be maintained well.

The key issue cited by PDS owners were largely related to new system of POS implemented by government for bringing transparency in the distribution. POS machines in some of the districts had reached to shops while in some it is underway.

For quality control no standard practice is followed, interviewees responded either monthly or bi-monthly checking of district and block godown. On the other hand JSO/ quality inspector mentioned quarterly inspection of godown at block level. Civil supply officers across the districts stated different procedures followed for sampling of supply under quality control protocol.

Monitoring

The whole assignment implemented in consultation with MI. PHFI ensured that all processes, procedures and activities are fully transparent and accessible to MI officials at any given point of the survey including the processes of recruitment of staff, training, fieldwork, etc.

The project team supported and guided by Dr. Subash Salunke, Senior advisor PHFI.

Section- 4

2.4 Recommendation & Conclusion

Current Supply Chain

Storage issues at PDS were highlighted during discussion due to non-availability of space or poor infrastructure which doesn't provide appropriate environment for the stocks to be maintained well.

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1. Approaching Anemia Awareness for Promoting DFS

- Building knowledge on anemia in selling DFS.
- Innovative approach to be designed considering tribal population perceptions and understanding on DFS

2. Promotion Based on Population Segmentation

- BCC strategy has to be stratified based on population segments urban, semi-urban, illiterate and literate population accordingly
- Multi prong BCC strategy based on socio-economic status and literacy levels of the households

3. Using Local Entertainment Channels

- Local entertainment mediums should be used for reaching the community and spreading awareness on benefits of DFS. Capitalizing on existing local folk performers for campaigns within the community. Their reach and acceptability in the community will prove to be effective strategy.

- Weekly markets are very popular across the villages and can be explored for spreading awareness

- Places of local gatherings, such as shops or panchayat or temples can be used for spreading awareness

- Existing forums like mandalis, youth clubs can be leveraged for awareness building and as direct interface with community

4. Media Habits and Promotion

- Mobile based innovative approaches can be designed for younger population., younger groups are more literate , has access to technology and use both print as well as electronic media

- BCC approach has to be culturally aligned; use of wall paintings focusing on DFS awareness with pictorials painted in Anganwadi center, schools, PDS shops, sub health centers, local kirana stores, etc.

- Wall painting at PDS shops will help in face lifting of these shops and also attract attention from the community on DFS coverage

5. Leveraging Community Workers

- Sensitization of community health workers on DFS usage is required for ensuring awareness of household members on the same.

- A life cycle approach has to be adopted and inter departmental convergence should be applied.

REFERENCES

- Toteja G.S., Padam Singh, Dhillan BS, Saxena BS. Micronutrient deficiencies disorder in sixteen districts of India. ICMR task force study. District nutrition project 2001
- Prevalence of Anemia Among The General Population Of Malwa (M.P.), India. Prakash Joshi, Dolly Joseph, Pranay Bajpai, Piyush Manoria, Priya Joshi, Vishal Yadav, Himanshu Dagore, R.K Jha, 2013. Accessed from https://jemds.com/latest-articles.php?at_id=407
- Gawarikar R, Gawarikar S, Triathi CB. Prevalence of anemia in adolescent girls of Ujjain in western India. The Ind. J. of nutrition and Dietetics. Vol 39111; Nov.2002
- R. Gawarika, S. Gawarika. A.K. Mishra. Prevalence of Anemia in Adolescent Girls Belonging to Different Economic Group. India Journal of Community Medicine Vol.31, No.4(2006-10-2006-12)
- Social Marketing to Convert Use and Purchase of Preservative Salt to Iodized Salt in Andhra Pradesh conducted by Sambodhi Research Supported by Micronutrient Initiative
- Summary Report Iodized Salt Coverage Study 2010 conducted in eight states of India. http://www.micronutrient.org/wp-content/uploads/2011/06/india-salt-coverage-report-2010.pdf
- Movies, Margins and Marketing: Encouraging the Adoption of Iron-Fortified Salt Abhijit Banerjee, Sharon Barnhardt, and Esther Duflo http://www.nber.org/papers/w21616
- Concurrent Monitoring of Mamta Abhiyaan supported by GoMP funded by FHI 360(MPSTAT)
- UP community mobilization project: Empowering women to change health behaviours and improve coverage of health services by activating social platform
- Communication mechanism for malaria prevention in Baiga tribal villages in Baiga Chak area of Dindori district, Madhya Pradesh, 2015
- Awareness of Anemia among Pregnant Women and Impact of Demographic Factors on their Hemoglobin Status Thangamani Balasubramanian, Mahalakshmi Aravazhi, Shantha Devi Sampath http://www.ijss-sn.com/uploads/2/0/1/5/20153321/ijss_mar_oa60.pdf
- Summary Report Iodized Salt Coverage Study 2010 conducted in eight states of India http://www.micronutrient.org/wp-content/uploads/2011/06/india-salt-coverage-report-2010.pdf
- Social Marketing to Convert Use and Purchase of Preservative Salt to Iodised Salt in Andhra Pradesh conducted by Sambodhi Research supported by Micronutrient Initiative
- Summary Report Iodized Salt Coverage Study http://www.micronutrient.org/wp-content/uploads/2011/06/india-salt-coverage-report-2010.pdf
- Food Security in India –Issues and Challenges. Reforms and Initiatives in PDS experience Sharing http://dfpd.nic.in/writereaddata/images/Original.pdf
- Movies, Margins and Marketing: Encouraging the Adoption of Iron-Fortified Salt Abhijit Banerjee, Sharon Barnhardt, and Esther Duflo http://www.nber.org/papers/w21616

ANNEXURE

APENDIX-A

Departmental Information:

1. BACK GROUND INFORMATION

I. Full Name of the Organization:

II. Complete Postal Address with Fax No./ Email ID/Contact No/ Website Address:

III. Year of Establishment:

IV. Type of Organization:

Central Organization ☐ State Organization ☐ Deemed Organization ☐

Private Organization ☐ National Importance Institute ☐

V. Particulars of the Departmental Officer Completing this Questionnaire

Name:

Designation: **Department:**

Work Address:

Email ID: **Mobile:**

2. HUMAN RESOURCES

2.1 Total Number of Personnel in PHFI Faculty:

PROGRAM- wise / DEPARTMENT -wise (Please use extra sheets)

Department-wise / Program wise	PHFI Faculty (2015-2017)	
	M	F
Sum of Male + Female		

3. FINANCIAL

3.1 Income/ Expenditure

Total Income received / Expenditure during last 3 years:

	2013-14	2014-15	2015-2016
Income Received			
Expenditure incurred			

***Data Source: Finnace Report from PHFI**

3.2 What are the sources of funding for your organization? Please indicate the percentage breakdown as Appropriate:

Government or public agencies (e.g., grants, fees, project) _____%

Donations & gifts (individuals, corporations) _____%

Special events (net of expenses) _____%

Membership fees _____%

Other sources (including endowment, interest) _____%

4. TECHNICAL DEPARTMENT

4.1 Please tick on the categories in which your organization is working

Education / Training	☐	**Complaint handling**	☐
Class Action / Litigation	☐	**Advocacy**	☐
Awareness Campaigning	☐	**Information Dissemination**	☐
Others.....	☐		

4.2 Please tick Area of your operation:

Rural ☐ **Urban** ☐ **Both** ☐

4.3 Please tick on the territory of your operation:

District Wise ☐ **State-wise** ☐ **National** ☐ **International** ☐

4.4 Please specify Name of District/State/Countries Covered.....

4.5 Does your organization participate in Consultation Process: Yes No

4.6 Number of Members in your Governing Board

Information of Members in PHFI			
Name	**Educational Qualification**	**Experience**	**Duration**

5. Do you have a grievance redressal mechanism for :

a) Gender Related Issues Y N

b) Academic Matters Y N

6. Mention women specific facilities in the Organization.

a) Public Conveniences / Washroom Y N

b) Common / Recreation Room Y N

c) Day Care Centres Y N

d) Women Security Arrangements Y N

7. Any policy suggestions for enhancing women participation in PHFI.

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Date: **Place:**

Thank you very much for the time and effort you committed in completing this questionnaire.

APPENDIX-B

Table: Sample size for Formative Research

S.No.	Target Respondents	Alirajpur	Dhar	Khargone	Barwani	Jhabua*	State
		Focussed Group Discussions(FGD)					
1	Non-pregnant, non-lactating women (6BPL and 6APL groups)						
2	Husbands of women in reproductive age group (2BPL and 2APL)						
3	Mothers-in-law/heads of households (2BPL and 2APL)						
4	Staff of implementing partner						
5	PDS shop owners						
6	FSOs (district)						
7	Quality Food Inspectors(district)						
8	Religious leaders						
9	Sarpanch						
10	District Collector						
11	Warehouse Manager (district)						
12	Godown In charge(block)						
13	Comptroller-Food & Drugs Administration						
14	Commissioner- Food & Civil						

	Supplies						
15	MD State Civil Supplies						
16	MD NHM						
17	Health Commissioner						
18	DD, Child Health & Nutrition						
19	DD, maternal Health						
20	(UNICEF) Development Partner						
	Sample size to Pre-test of the communication Prototype						
S.No.	**Target Respondents**	**Any one neighbouring district in consultation with MI**					**State**
Focussed Group Discussions(FGD)							
1	Non-pregnant, non-lactating women						
2	Husbands of women in reproductive age group						
3	Mothers-in-law/heads of households						
4	Staff of implementing partner						