

1. INTRODUCTION

Iodine Deficiency Disorders continue to threaten the health and well-being of several hundred million people throughout the developing world. Elimination of IDD is one of the most important health and social goals.

Bihar is the second most populous state in India. The northern part of the state lies in the sub-Himalayan terai and existence of severe to moderate iodine deficiency in this region is well established. IDD elimination programme was initiated in the state in the late 1960s in few districts. It was realized later that iodine deficiency constituted a public health problem in all the districts of the state. By 1988 legislative measures were put in place to ban the sale of non-iodized salt in the entire state.

The results of the study reveal that iodine deficiency continues to be a public health problem in Bihar. The median urinary iodine is 85.6 µg/L which is indicative of iodine deficiency in the population. A high proportion of the population (31.5%) has very low urinary iodine excretion, suggesting existence of severe iodine deficiency in many pockets. Only 40.1% of the households consume adequately iodized salt. This is a drastic reduction in household coverage, compared to the findings of NFHS-2 DONE IN 1998-99.

The findings of this study warrant instituting corrective measures on a war footing to ensure that the population of Bihar has access to adequately iodized salt and at least 80% of households receive and use adequately iodized salt. Government of Bihar is committed to the goal of Tenth Five Year Plan. These are states as under:

2. GOAL FOR GOVERNMENT OF BIHAR UNDER TENTH FIVE YEAR PLAN

- Achieve universal access to iodized salt
- Generate district-wise data on iodized salt consumption
- Reproduction in the prevalence of iodine deficiency disorders to less than 10% by 2010.

3. OBJECTIVES

1. To support all districts to have in place, a functional plan of monitoring and advocacy for use of iodized salt.
2. To ensure orientation and training of all CSs, DPOs, DEOs, MOICs, CDPOs, School Principals, Lab Technicians, Food Inspectors and all field functionaries in every district.
3. To recruit and train Social Mobilizers to co-ordinate with SNC in the state, at divisional head quarters and in every district.
4. To facilitate and process supply and distribution of salt testing kits by June 2005; and IEC material for display and counseling by July 2005 to all districts.
5. To Support districts in implementation, monitoring and review of promotional activities as per their plan, at all levels.
6. To carry out need assessment of all Salt testing laboratories in the state, and equip them to function routinely and effectively.
7. Establish a system for testing salt samples at loading points, during transportation by road and railways; at entry points and at the time of unloading.

4. PLAN OF ACTIVITIES

Componets of INDDCP	Activities to be initiated	Indicator
1. Demand Creation of Iodized Salt	1. State Nutrition Cell to obtain requirements blockwise for Salt Test Kits, (STKs) to be supplied to AWCs, schools, and for Laboratories from each district. <ul style="list-style-type: none"> • Facilitate procurement and supply of STKs as per the requirement for SNC. • Ensure distribution from state to the districts • Facilitate distribution from CS office in the district to MOICs at PHCs or blocks. • Ensure distribution plan by MOICs for supply of kits to ANMs. • Ensure distribution plan by CDPOS for supply of kits to AWWs. • Ensure distribution plan by BEOs for supply of kits to schools. • Ensure distribution plan by Labs for supply of kits to entry points. 2. Provide Pol/mobility support for moving kits to the respective destinations.	All Functionaries to have at least 2 kits per month for 3 month.

	<p>3. State Nutrition Cell to ensure relevant IEC material for IFF</p> <ul style="list-style-type: none"> ▪ Initiate development of IEC material by a Technical committee ▪ Reprint of available IEC material (folders and leaflets) ▪ Ensure supply of these to PHCs, AWCs and schools <p>4. Appoint the following Staff for co-ordinating activities in the district</p> <ul style="list-style-type: none"> ▪ State Co-ordinator for IDD: 1 ▪ Regional Mobiliser: 5 (1per 7-8 districts) ▪ District Mobilizer: 19 (1 for 2 districts) ▪ Workout cost estimates for the staff support ▪ Process recruitment for extenders in the field. ▪ Ensure all staff are trained and have role clarity before placement. 	<p>All IEC material available with ANM, AWC and with school teachers by July-August 2005.</p>
<p>2. Social Mobilization for salt monitoring and advocacy.</p>	<p>1. For Social mobilization, the Director Health, ICDS and Education to jointly ensure co-ordination and continuous partnership of the two depts. at all levels- state, district, Block, & village.</p> <p><u>State level:</u></p> <p>Joint meeting of health, ICDS & Education to review the progress every quarter under chairmanship of Development Commissioner or Chief Secretary.</p> <p><u>District level:</u></p> <p>Monthly meeting of CS, DOP and DEO under chairmanship of DM for an update on the monitoring and promotional activities for iodized salt.</p> <p><u>Block level:</u></p> <p>Joint review-meeting of ANM AND AWW, facilitated by MOIC and DCPO to review the previous month, plan for the coming month, submission of reports.</p> <p>Block Education officers to review the progress and plan for the coming month through monthly meetings of Nodal teachers and or Head Masters.</p> <p><u>Village level:</u></p> <p>The activities will be through AWCs and Schools.</p> <ul style="list-style-type: none"> ▪ Ensure directives from state and district Authorities for operationalising the activities at every level. ▪ Ensure technical and financial support for the above. <p>1. AWC:-</p> <ul style="list-style-type: none"> ▪ Each ANM to co-ordinate with AWW to carry out these salt testing drives and other activities on fixed days, routinely. ▪ AWW to mobilize community for participating in these activities ▪ AWW in each village to have a team of community volunteers to support monitoring of salt quality at HH level and also serve as a pressure group for iodized salt. ▪ All these team members to have received orientation and role clarity for the activities by the CDPO/LS/MOIC/ANM. ▪ Each team including ANM and AWW to have material for counseling the families during salt testing drives. ▪ Records sheets available and correctly filled by each team. ▪ Ensure salt samples from HHs and shops are tested. ▪ Ensure counseling by the team members. 	<p>All meeting held in the month of June 2005.</p> <p>Meeting held at the state.</p> <p>Meeting held at the district</p> <p>Ensure intimation received from state to district and district to blocks</p> <p>Activities and monitoring sessions taking place as per plan.</p>

	<p>2. Schools:</p> <ul style="list-style-type: none"> ▪ Schools to have a plan of activities for any one week during every month for 3 months. ▪ Each school to spell out the activities within and outside with timeline till end August 2005 ▪ Financial support for organizing activities in schools ▪ Teachers to receive orientation on IDD ▪ Teachers to supervise testing of salt samples brought by the children ▪ Teachers to organized and supervise activities outside school once in a quarter. ▪ Teachers to counsel students using counseling material ▪ Ensure schools have record sheets filled, compiled and submitted to BEO. ▪ Ensure directives from state and district authorities for operationalising the activities at every level. ▪ Ensure technical and financial support for the above. 							
<p>3.Orientation/ Training</p>	<p>Preparation of an orientation/ training of field/ supervisory personnel under three departments:</p> <table border="1"> <tr> <td>Health:</td> <td>MOICs & ANMs</td> </tr> <tr> <td>ICDS:</td> <td>CDPOs & AWWs</td> </tr> <tr> <td>Education:</td> <td>BEO & Head Master / Nodal teachers</td> </tr> </table> <p><u>State Level</u> : Half Day orientation of State, Region and concerned officials on the magnitude of IDD and role of each department.</p> <p>Day 1 :Orientation of Regional Directors, Civil Surgeons, PHI Directors, Food and Drug Controller, Managing Director- Bihar Food and Civil Supplies, Divisional Railway Manager, At Danapur, Secretary Transport, Secretaary Education and Director primary and Adult Education, Director ICDS at SIHFW Patna.</p> <p>Day 2 : Training of Lab Technicians (38 in no) and Food Inspectors (26) from all districts at SIHFW Patna.</p> <p>Topics:</p> <ul style="list-style-type: none"> ▪ Redefining role of each personnel ▪ Detailed sampling ▪ Testing Procedures ▪ Co-ordinating with Food Inspectors ▪ Testing at Food and Drug Laboratory ▪ PFA Act <p><u>District level:</u></p> <p>One day meeting: Civil Surgeons to facilitate and DMs to chair the Co-ordination Committee Meeting to sensitize, MOICs and orient DWP. DPO, CDPOs/LS, DEO, BEO, District Supply Officer and Superintendent of Police on their role in supporting the efforts of GoB to improve quality and demand for iodised salt.</p> <p><u>Block Level</u> :</p> <p>Half-day, joint orientation of ANMs and AWWs by MOICS and CDPOs on IDD/IS and stimulate community level promotional activities.</p> <p>Topics:</p> <ul style="list-style-type: none"> ▪ IDD Prevalence 	Health:	MOICs & ANMs	ICDS:	CDPOs & AWWs	Education:	BEO & Head Master / Nodal teachers	<p>Training schedule of different personnel, functionaries under Health, ICDS and education departments available at the State Nutrition Cell., for follow up and monitoring</p> <p>90% of the state official attend the orientation meeting</p>
Health:	MOICs & ANMs							
ICDS:	CDPOs & AWWs							
Education:	BEO & Head Master / Nodal teachers							

	<ul style="list-style-type: none"> • Consequences • Benefits of IS • Role of schools in advocacy • Monitoring Salt • Recording of Date • Plan of activities in the school <p>Ensure financial support at all levels of training.</p> <p>State level :</p>	
4. Reviving Laboratories	<p>Ensure that every district has functional lab for testing iodine in salt with iodometric titration method.</p>	<p>All posts of lab technicians filled.</p>
	<p>1. Appoint a trained lab technician in every lab</p> <ul style="list-style-type: none"> • Prepare a simple training package for lab technicians • develop an instruction sheet on the procedure for Iodometric Titration. <p>2. Ensure potassium iodate, reagents chemicals & glassware in each lab.</p> <ul style="list-style-type: none"> • Develop a system to obtain a list of requirements on quarterly basis. • Arrange or explore the possibility of a revolving fund for meeting recurring costs by the district health departments 	<p>Funds made available for extenders in the field</p>
<p>5. Monitoring and supervision of activities</p>	<p>1. Ensure that IDD related activities form part of agenda in regular review meeting.</p> <p>2. Developing of check list for monitoring and supervision by:-</p> <ul style="list-style-type: none"> • MOIC, for sessions in PHCs/HSCs, • CDPO/LS for activities in the community through AWC and also the supplementary food. • Checking of salt quality in the supplementary food at AWC by AWW. • BEO for sessions organized within and outside schools • Health personnel, for the labs • Food Inspectors, to check salt quality of salt in the MDM (Mid-Day Meal) in the schools, in the PDS and at entry points. • Additional staff mobilized to support monitoring of all activities related to consumption of iodised salt. <p>3. Ensure timely reporting and submission of forms:</p> <ul style="list-style-type: none"> • from AWC to block • from PHC/HSC to block • Schools to block • All above to the district health Dept with a copy to DPO/DWO and DEO • Labs to CS office Health Dept. • Entry points to CS Office • Data from above sources compiled for each district and sent to State Nutrition Cell Dept of health GoB. <p>4. State Nutrition Cell to share the district-wise data of each department and the consolidated Report, with UNICEF.</p>	
6. Advocacy for political and administrative support	<p>1. Ensure salt producers are providing good quality iodized salt and salt trades to insist on purchase of Iodized Salt from suppliers with good quality.</p> <ul style="list-style-type: none"> • Meeting with Salt Commissioner and GoB, along with Salt Producers of Rajasthan and Salt Trades of Bihar and have dialogue to motivate salt producers to supply standard quality salt to Bihar. • Meeting with Salt Commissioner and GoB, along with Salt Producers of Rajasthan and Salt Trades of Bihar and have dialogue to motivate salt producers to supply standard quality salt to Bihar. • Alternately, encourage more salt trades from Bihar to indent for Iodised 	

	<p>salt from Gujrat, which is of better quality.</p> <ul style="list-style-type: none"> ▪ Explore with Salt Department, the possibility of purchase of iodized salt by trades of Bihar, beyond the quota system. <p>2. Cost control though negotiations with railways for reconsideration of freight charges on salt, under priority A.</p> <ul style="list-style-type: none"> ▪ Correspondence from Chief Secretary to Chairman Railway Board. ▪ Correspondence from Governor to Railway Minister GoI <p>3. Meeting with Chief Secretary and also Secretaries Education Health Social Welfare and Food and Civil Supplies Director to Issue directives for mandatory use of iodised salt in:</p> <ul style="list-style-type: none"> ▪ ICDS to use Iodized salt in Supplementary food prepared in AWCs. ▪ Mid-Day-Meal scheme in school to use iodised salt. ▪ Govt.institutions such residential school, training centres to use only iodised salt. ▪ Government hospitals providing meals to use iodized salt. ▪ Fair price shops under PDS to stock and sell only iodised salt as an essential food commodity. 	
<p>7. Monitoring salt quality</p>	<p>1. Ensure quality of salt with salt Department at the time of loading in Rajasthan.</p> <ul style="list-style-type: none"> • Conduct need assessment of National Lab in Rajasthan for effective functioning. • Co-ordinate with ICCIDD for equipping the lab for testing of salt before loading. • Support for round-the-clock testing of salt in the lab. <p>2. Ensure quality control of salt during transportation and storage by Railway.</p> <ul style="list-style-type: none"> ▪ Meeting chaired by Chief Secretary with dept. of Health GoB and Railways Board (Danapur), for transport of salt in wagons under hygienic conditions. ▪ Prepare a plan for quality control with Railways, Salt Department and Government of Bihar. ▪ Recruit trained staff for conducting tests. ▪ Development of a checklist for monitoring by Food Inspectors ▪ Ensure intimation from Salt Department on the expected arrival of the railway wagon with salt, indented from Bihar. ▪ Establish a communication system for receiving information such as exact dates, time and points of unloading of salt by the railways to the Labs ▪ Arrange for random testing of salt samples at unloading points in Bihar by Food Inspectors. <p>3. Ensure quality control of salt during transportation by road.</p> <ul style="list-style-type: none"> ▪ Mapping the entry points in district of bordering states ▪ Explore with Transport Department the possibility of utilizing check posts as also testing points for salt quality by Health Dept. ▪ Meeting of DMs from border districts along with CSs, Transport Commissioner, to establish mini labs at these points. ▪ If agreed, equip the check post for conducting tests such as Salt Test Kits, checklist, reporting formats. ▪ Plan for routine checking of salt at these points in place. ▪ Ensure regular submission of reports from the mini labs ▪ Monthly meetings as the district level to review the Reports and take further action for samples with no iodine or poor iodine content. 	<p>Report of Need Assessment of Lab available with Salt Department.</p> <p>Monitoring sessions routinely taking place.</p> <p>Salt entering the state routinely checked for iodine at all pints of bordering districts.</p> <p>No. of samples with no iodine/low iodine in decreasing trend.</p>

	<ul style="list-style-type: none">Follow up action as per the reports received from the districts is ensured by State Nutrition Cell and share with UNICEF.	