

IQ+ Jagriti

VOL. II, ISSUE 1, FEBRUARY 2004

Dear Colleagues,

The First Issue of IDD Newsletter 'IQ+ Jagriti' has been received with enthusiasm. So much so that 1000 extra copies had to be printed.

In IQ+ Jagriti, "IQ+" stands for "Iodine Quota" and "Intelligence Quotient". "Jagriti" means Awakening. In our case, it is an awareness about the consequences of iodine deficiency. Generation of awareness about the serious effects of iodine deficiency should help in sustaining elimination of IDD with the participation of all the stakeholders.

We thank all our readers for their overwhelming response to our first edition. The Newsletter can be a medium of sharing each others experiences in working towards a common goal of sustainable IDD elimination.

This Issue of IQ+ Jagriti has focussed on the South Asia Region,

especially Bhutan, Myanmar and Sri Lanka. Also included is a message from Dr Rukhsana Haider, Regional Advisor, Nutrition for Health & Development, WHO South East Asia Regional Office, and a report from two regional conferences held in New Delhi, India and Chiang Mai, Thailand. Your contribution for publication in future issues, the themes of which are given below, is invited and very much welcome.

With greetings,



Dr. Chandrakant S. Pandav
Regional Coordinator,
ICCIDD-South Asia Region

Forthcoming Issues and Themes:

→ **Iodised salt** - (Role of iodised salt in IDD elimination programme, production, quality control, distribution, price, etc.)

→ **Communication** - (IEC, grassroots level programmes, professional level etc.)

→ **Stakeholders** - (Multisectoral approach, various stakeholders involved)

IDD and Livestock

→

We invite contributions on the above subjects for publication in the IDD Newsletter.



The International Council for Control of Iodine Deficiency Disorders (ICCIDD) is a non profit, non governmental, organisation dedicated to and ensuring sustainable optimal iodine nutrition. The membership is multi-disciplinary including endocrinologists, public health workers, salt producers, management specialists, communicators, laboratory analysts, researchers, among others. An international Board of Directors promotes ICCIDD's goals, working in close coordination with countries and international organisations. Support for activities has come from International aid programs of Canada, Australia, The Netherlands, and USA, as also from the World Bank, UNICEF and others. More information is available at the ICCIDD website: www.iccidd.org



From the unreal lead me to the real;

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ICCIDD: Vision, Mission & Dedication

Vision: The vision of ICCIDD is a world, virtually free from Iodine Deficiency Disorders with national endeavors to maintain optimal iodine nutrition, primarily through consumption of iodized salt, which should be made easily available and affordable for all people for all times.

Mission: The mission of ICCIDD is to provide a focused advocacy to governments and development agencies, of a continued priority for iodine nutrition, providing technical expertise in a multidisciplinary approach.

Dedication: ICCIDD dedicates itself to programs fully supported at the national level for permanent, sustained success and will work with all partners and national entities towards that end.



Letters To the Editor...

Dear Dr Pandav,

I am in receipt of your first edition of ICCIDD quarterly Newsletter, 'IQ+ Jagriti' and thank you for the same.

The publication is found to be a very exhaustive and informative one. I am confident that this periodical would be of great help to the professionals who are interested in this field.

I wish all the best.

Yours sincerely

Ramesh Chennithala
(Member of Parliament, Lok Sabha)

Dear Professor Pandav,

Today I have received a copy of your IDD NEWS "Jagriti" Vol.I, Issue 1, October 2003. It is beautiful, very informative and has an excellent get-up. Congratulations. A great job done.

With best regards & best wishes

Prof. .B.L.Verma,

Jhansi (via e-mail)

Dear Professor Pandav,

I got the IDD Newsletter yesterday. Congratulations. It is well brought out and is informative. Will keep in touch. Our URL www.endocrine-india.com at is now active again.

Very sincerely,

G.R.Sridhar

Endocrine & Diabetes Centre, 15-12-16 Krishnanagar, Visakhapatnam (via e-mail)

IDD Elimination Programme – Role of Laboratory-based Programmes -

A Regional Programme Outlook

Dr. Rukhsana Haider*



The World Health Organization (WHO) commitment towards elimination of Iodine Deficiency Disorders (IDD) dates back to its inception in 1948. WHO has been supporting Member Countries in the South-East Asia Region, in their efforts to reduce and eliminate IDD. Each country in the region has specific

programmes taking into consideration the local situation and needs, based on surveys and research. This conforms to the guidelines of WHO and other international agencies committed to the cause of IDD elimination. Although every country has established laboratory-based programmes, an imperative need was felt for a standardized and coordinated laboratory system in the region, for better monitoring and management. Accordingly, a workshop was held in Bangkok in May 2001 organized by the Mahidol University, Thailand, in association with CDC Atlanta, WHO, UNICEF, MI, ICCIDD and PAMM. The Workshop aimed at focusing attention on the establishment of a network of International Resources Laboratory Network (IRLI). The purpose of this network would be to strengthen the capacity of laboratories to accurately measure iodine in urine and salt. One of the outcomes of the workshop was to recommend the formation of regional, national and sub-national networks to serve as resource centres.

As a follow up to the Bangkok workshop, the World Health Organization South East Asia Regional Office (WHO-SEARO), in collaboration with the ICCIDD South Asia Regional Office and the All India Institute of Medical Sciences, New Delhi organized two inter-country workshops on 'Iodine Monitoring Laboratory Procedures and National IDDE Programmes'. There are many independent laboratories conducting both the salt and urinary iodine analysis, but what is required now is a system for providing regular exchange of samples between the laboratories.

The workshops objectives were:

- 1) To introduce and sensitize the participants to the relevant issues in national programmes for eliminating iodine deficiency disorders
- 2) To train/reinforce training of participants in the estimation

of iodine content of salt by iodometric titration and urinary iodine measurement using the "simple microplate method"

- 3) To introduce the participants to the concept of annual cyclic monitoring, in the monitoring and evaluation aspects of their national IDD programmes.

As most countries in the world are going through a transitional phase, the indicators to measure iodine deficiency status have to be monitored carefully. It is vital that there is representative, reliable data to track the progress of the programmes, through adequate quality control and quality assurance measures. One of the priorities discussed in the workshop, included setting up of standardized internal and external quality control protocols, regardless of the methods of estimation used.

There is a need for quality epidemiological data in terms of salt iodine and urinary iodine, and this depends on the laboratory practices and methods that conform to international standards. If there are trained laboratory managers and other technical professionals in the key centres in the countries, and thereby in the region, they can further train others in the sub-national / regional laboratories in order to achieve the goal of decentralized capacity building.

The policy issues involved in the establishment of a urinary iodine laboratory network are multi-sectoral. The guiding principle in the elimination of IDD in the world should be sustainability. It will be our endeavor to give greater emphasis to sustainable IDD control programmes. Collaboration and coordination at regional level will go a long way towards the success of the programme. Each one of us has an important role in this process.

**Dr. Rukhsana Haider is the Regional Advisor, Nutrition for Health & Development, WHO SEARO, New Delhi*



IX ASIAN CONGRESS OF NUTRITION, NEW DELHI, 23-27 FEBRUARY, 2003

The IX Asian Congress of Nutrition (ACN), organized by the Nutrition Foundation of India (NFI) and Nutrition Society of India (NSI) under the auspices of the Federation of Asian Nutrition Societies, was held in New Delhi from 23 to 27 February, 2003. Nearly 1400 delegates from 49 countries, of whom 1085 were from 25 Asian countries, attended the conference.

Dedicated to the concept of good nutrition and a healthy life, the 5 day meet was held in India after a gap of 22 years. Both these meetings were chaired by Dr. C. Gopalan, the President of NFI. Dr Gopalan has been responsible for creating a fraternity of Asian nutrition scientists to discuss and promote nutritional sciences relevant to public health in the region. This year, the main theme of the conference was: 'Nutrition Goals for Asia "Vision 2020".'

The conference was inaugurated by Dr. K.C.Pant, Deputy Chairperson of the Planning Commission. Dr Pant has always taken a keen interest in nutrition, and was one of the architects of the Tenth Five Year Plan, which spelt out the nutritional problems and the goals to be achieved by the end of the Plan period (2002-2007). Dr. Pant felt that despite all efforts on several fronts related to nutrition, it may not be possible to eliminate undernutrition in the next decade. It was his feeling that there is an urgent need to operationalise the screening of vulnerable groups to identify high risk groups to initiate food supplementation and provide healthcare.

The conference proved to be a scientific feast, with plenary lectures (3), special lectures (3), plenary sessions (6) symposia (30), oral communications (100) and poster presentations (500).

One of the many Symposia that were held included one entitled *"Elimination of Iodine Deficiency Disorders in Asia"*. Held on the second day, February 24th 2003, this session was chaired by Dr. C.S.Pandav, ICCIDD Regional Coordinator. Dr. G.N.V.Brahmam of National Institute of Nutrition was the coordinator. The following papers were presented:

1. Policy Environment and National Health Programmes: A case study of the National Iodine Deficiency Disorders Control Programme (NIDDCP) in India – by Dr. C.S. Pandav (India)
2. Iodine Deficiency disorders in Bangladesh : Role of different institutions / organisations in the elimination programme –by Dr. Q.Salamatullah (Bangladesh)
3. Iodine Deficiency Disorders Control Programme –A successful public health intervention in India – by Dr. B.K.Tiwari (India)
4. IDD Control programme in Thailand : The Programme Managers IDD perspective – Dr. S.Sinawat (Thailand)
5. A successful programme in Iran– Experience sharing – by F.Azizi (Iran)

"Iodine deficiency is so easy to prevent that it is a crime to let a single child be born mentally handicapped for that reason."

H. Labouisse, Executive Director,

UNICEF, 1978



Promotion of sustainable iodine deficiency disorders control programmes in who south-east asia and eastern mediterranean regions

This major regional initiative was held in Chiang Mai, Thailand from 24 to 27 June 2003. A brief report is presented.

Iodine deficiency is the world's most prevalent – yet easily preventable – cause of brain damage. Today we are on the verge of eliminating it – an achievement that will be hailed as a major public health triumph, ranking together with smallpox and poliomyelitis.

Iodine nutrition is crucial during pregnancy to ensure the healthy mental development of the foetus. The magnitude of the problem in this Region is evident by the recent estimates that 172 million people are affected by goiter in South East Asia, and another 600 million (41 % of the population) are at risk for developing IDD. In nine out of the 11 Member Countries (which have provided data), IDD remains a public health problem in varying degrees. While countries like Thailand and Bhutan have virtually eliminated IDD, in other countries like Bangladesh, India, Maldives, Nepal, and Sri Lanka, significant proportions of the populations remain at risk, without access to adequately iodized salt. The proportion of households consuming adequately iodized salt is 95% in Bhutan, 79% in Thailand and 49% in Sri Lanka and India, and only 8% in Maldives, the overall average for the region being 70%. Universal Salt Iodization (USI), is in place in five Member countries.

The proposed WHO recommended global intervention strategy for the control of IDD is universal salt iodization (USI). While the strategy is relatively simple and cost-effective, many countries in the Region are still in the process of forming effective partnerships with the salt industry, to monitor sustainable provision of adequately iodized salt to all communities. Regional constraints in the universal provision of iodized salt must be identified, and addressed. Efforts to avert the serious economic and health consequences of IDD need to be intensified

Status of USI and IDD control programmes in the South-East Asia (SEA) Region

Dr Rukhsana Haider presented the progress of countries to sustain the IDD control programmes in the SEA Region, based on the questionnaires that had been sent earlier to the national focal points. In the Region, Bhutan was the first country to have had an external assessment. At the time of the Consultation, they were awaiting certification from WHO and UNICEF, declaring that Bhutan had successfully eliminated IDD. (This issue carries an article on Bhutan)

Field visits in the region showed that the iodine content of the same brand of salt at retail stores could vary from 30 ppm to nil. The need to revise legislation and enforcement was stressed as fines imposed by governments varied from country to country.

Progress since 2000 (the SEA-IDD meeting in Thailand) showed that most of the countries had political commitment (formulation of legislation and regulations), and continued to develop and distribute IEC materials; they also involved salt producers in advocacy meetings and trainings, and had monitoring systems in

place. But many countries reported that the enforcement system did not achieve the goals set by the governments.

Dr. Haider stated that as many countries depended on imported salt, legislation and enforcement must be strengthened. Production level monitoring needed to be reviewed and standardized, and more impact indicators should be considered for surveillance. She emphasized that the pace would definitely need to be stepped up if IDD elimination was to be achieved by 2005.

ICCIDD briefing/orientation

Dr Sangsom Sinawat, ICCIDD Coordinator for Thailand made a brief statement as the ICCIDD Representative to the Conference. She reaffirmed ICCIDD's pledge to sustainable IDD elimination and offered its technical expertise in making IDD programs sustainable.



REPORT ON PROGRESS TOWARD USI AND VIRTUAL ELIMINATION OF IDD IN MYANMAR

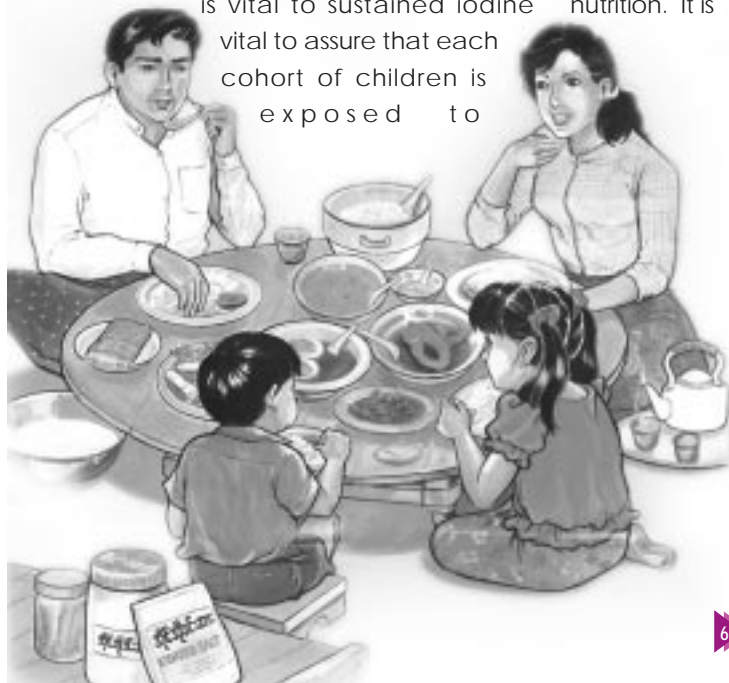
Universal Salt Iodisation has been the primary strategy for elimination of IDD in Myanmar. They have also used iodised oil in areas of severe iodine deficiency. The survey in 1997 estimated the total goitre prevalence to be 28%, with coverage of iodised salt being 60%. Dr. David P. Haxton, Member, ICCIDD Board of Directors visited Myanmar from 13th to 22nd Feb 2003 for evaluation of the progress made on Universal Salt Iodisation and elimination of IDD in the country. Excerpts from his report are presented.

Regarding the Program Processes

Government commitment at the senior levels, as with all other major commitments to this national undertaking, should be renewed annually. The National Committee could consider widening its membership. Monitoring of effectiveness of supervision, reporting and oversight should become a priority to assure constant and consistent high quality of leadership and management. The present system is overly dependent upon UNICEF financial and other support and thus risks sustainability.

A plan for communications is needed that simultaneously addresses issues of demand for the product, understanding of the need for iodine nutrition improvement, need for quality management of production of iodized salt, need to sustain high level commitment and performance of officials and others, and to make iodised salt the new norm.

Penetration of the education and learning channels is vital to sustained iodine nutrition. It is vital to assure that each cohort of children is exposed to



learning about values of iodine in the diet, and that annually they are reminded of the need.

It is important that farmers and others with domestic animals recognize the need for iodine nutrition for their animals and the benefits derived. In addition, the large food processing industry should be enrolled as an ally with insistence that iodized salt be used in the processing.

The current data and information being collected should be seen as the core for a very strong database.

This information and data not only demonstrate what progress is being achieved, but offer opportunities to improve communications by using the data and information more publicly and more widely. That said, the recording and processing suggest need for modernization.

There should be a law requiring that all food grade salt be iodized. This protects the consumer and assures prevention of serious problems. In drafting the law, additional consideration needs to be given to defining with clarity the standards for salt and the standards processing brine. A law should protect the producer from unscrupulous competition, smuggling, and from misguided accusations on issues of fortification. It should assure the consumer of safety. The law should also forbid import of non iodised salt.

Summary of Conclusions

Undoubtedly the Ministry of Mines and UNICEF have combined to allow ingenuity in the programme. Progress is steady under very difficult conditions. Iodization processes are fundamental, but effective and the persistent testing gives confidence of further progress.

Caution, however, needs to be exercised with vigor to meet the best compromise between having adequate personnel and activities including salaries, materials, travel, and support needs.

Myanmar can reach the level of appropriate iodization of 90% of production for human consumption by 2004 but urgent review of the current effort is indicated to assure improved monitoring facilities and to assure national supported infrastructure.

The absence of a law may be a reason for absence of test standards for salt. Thus the product may have other chemicals in it at time of iodization. A law would protect the consumer and the producer and underscore the priority of the nation to this effort to protect newborns from preventable brain damage.

Such a law would re-enforce the need to have all tests standardized and checked with a standard quality control system and laboratory.

The reported level of iodized salt reaching households salt does not meet the requirement for sustained delivery of adequate iodine. It may also be attributed to other factors such as inadequate or inaccurate testing. Officials indicate this is receiving serious attention at present. Subsequent surveys might reveal more information.

A qualified technical person could be asked to look at the iodisation method now used in combination with the drying process in a centrifugal force barrel. It is not likely that major capital investment can be expected. The issue is to make what is working well now, work better.

Repackaging of iodized salt into smaller competitive sized bags at the market should be prohibited.

Work to improve the cap on the salt testing kit should be accelerated. The kit should be certified to WHO standards. While it may be accurate and stable, it equally may also give false information and data less than what the management requires. Consideration to increasing the production of kits is recommended.

Laboratory results need comparison for quality control with a recognized laboratory, perhaps in China, or Thailand. Perhaps the Global Network can assist in facilitating this.

Laboratory facilities and operations at production sites and wholesale outlets are the bare minimum. Urgent attention to (a) upgrading (b) design and execution of a stable supply chain of replacements and spare parts (c) improved quality assurance checks against standards.

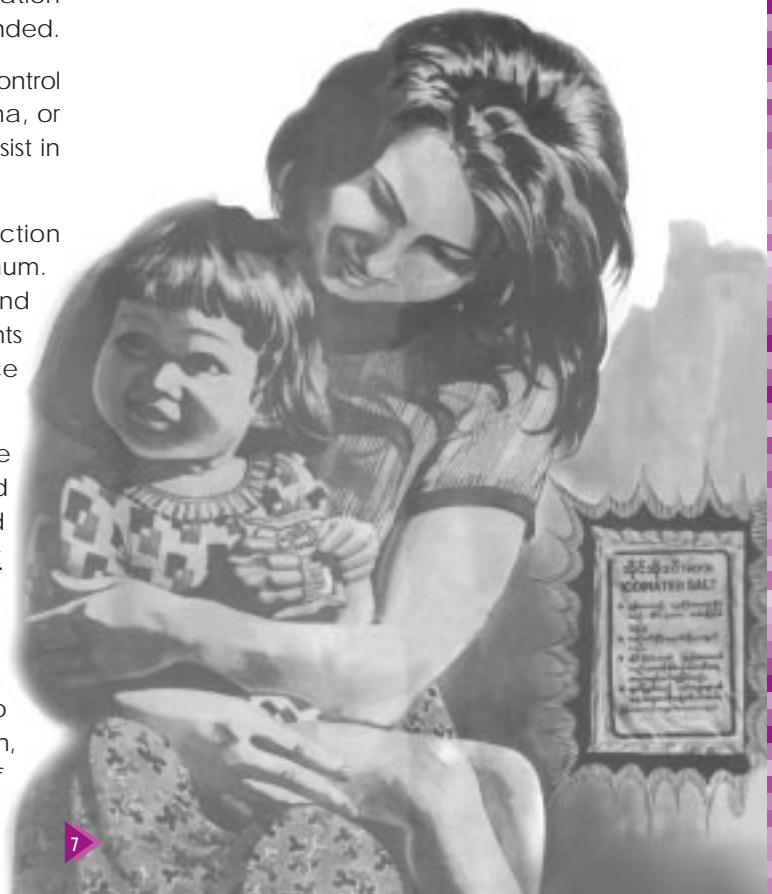
Renewed emphasis needs to be placed on the "Universal" in the goal: all salt for all human and animal consumption, and all salt for use in food processing should be the norm. In short, all salt in all of the country should be iodised for all people for all the time.

So far, the producers, processors, wholesalers and retailers have not been enrolled as allies to take on the effort of advertising, public information, public education. Myanmar has a long history of community collaboration and perhaps via this

important social asset ways can be found to move ahead more rapidly.

The Government of Myanmar and UNICEF should, on priority, review existing practices, facilities and plans for the period 2003-2006 and adjust the investments to match the essential needs of the effort. Of the four major indicators in the WHO, ICCIDD, UNICEF guide, all are being pursued. Persistent emphasis on achieving USI at all production sites and improvement of the monitoring and reporting systems, combined with innovative approaches to the small holders will assure continued forward progress toward the agreed goal of USI, virtual sustained elimination of IDD and sustained iodine nutrition. The current supervision from the Ministry of Mines is good; reporting is regular and processed rapidly. The supervision of the Ministry of Health is good and the monitoring work under difficult conditions is to be commended.

In the WHO, ICCIDD, UNICEF guidelines there are a minimum of ten programmatic indicators of which eight must be at high level of performance to suggest sustainable performance. (These guidelines are listed in this issue. Please see page 8). The national efforts in Myanmar are advanced on a good number of these and recognized. Refinement of progress on some is needed. Improvement is vital, so as to achieve elimination of IDD in Myanmar and sustain it thereafter.



Citation from the All India Institute of Medical Sciences (AIIMS) to the Royal Government of Bhutan for implementing a process of Sustainable elimination of IDD

We have mentioned briefly in our newsletter about Bhutan marking the achievement of the goal of sustainable elimination of IDD. Bhutan is the first country in the region to have this landmark achievement. The All India Institute of Medical Sciences (AIIMS), New Delhi has presented a citation and a plaque to the Royal Government of Bhutan for commendable efforts in eliminating IDD. The plaque was received by His Excellency Mr. Lyonpo Dago Tshering, Ambassador of Bhutan to India.

We quote relevant paragraphs from the citation:

"Iodine deficiency disorders (IDD) have long been a major public health problem in Bhutan. Over the past three decades several studies have been conducted on the prevalence of IDD in Bhutan. The first published report was by two English doctors who spent five weeks in Bhutan in 1964. While these doctors did not conduct an entirely empirical study to specifically investigate goitre, they reported that goitre among the population was "so prevalent as to be taken for granted".

Bhutan may be one of the first countries in the world to have begun annual cyclic monitoring. As per the annual cyclic monitoring system, the country/area is divided into an appropriate number of zones, comprising a selected number of districts which are surveyed in turn, over five years.

The WHO/UNICEF/ICCIDD guidelines have specified ten programme indicators of which eight criteria have to be fulfilled for a country to be declared as having completely eliminated IDD as a public health problem.

- 1) An effective, functional national body (council or committee) responsible to the government for the national programme for the elimination of IDD. This council should be multidisciplinary, including the relevant fields of nutrition, medicine, salt industry, education, the media and consumers, with a chairman appointed by the Minister of Health
- 2) Evidence of political commitment to universal salt iodisation and the elimination of IDD
- 3) Appointment of a responsible executive officer for the IDD

elimination programme

- 4) Legislation or regulations on universal salt iodisation. (While ideally regulations should cover both human and agricultural salt, if the latter is not covered this does not necessarily preclude a country from being certified as IDD-free.)assessment of progress in the elimination of IDD, with access to laboratories able to provide accurate data on salt and urine iodine
- 6) A programme of public education and social mobilisation on the importance of IDD and the consumption of iodised salt
- 7) Regular data on salt iodine at factory, retail and household levels
- 8) Regular laboratory data on urine iodine in school aged children with appropriate sampling for higher risk areas
- 9) Co-operation from the Salt Industry in maintenance of quality control
- 10) Database with recording of results or regular monitoring procedures, particularly for salt iodine, urine iodine and, if available, neonatal TSH, with mandatory public reporting

The Royal Government of Bhutan has fulfilled ALL THE TEN CRITERIA.

Through the exemplary efforts of the Royal Government of Bhutan, the programme has ensured elimination of iodine deficiency disorders in Bhutan. The introduction of cyclic monitoring as part of the monitoring process has worked to the country's advantage."

Key Events in Bhutan's IDD Control Programme

1.	Iodine Deficiency Disorders in Bhutan: Extent and Severity: First nationwide IDD study	1983
2.	Production and Distribution of iodised salt to control Iodine Deficiency Disorders in Bhutan	1983
3.	National Policy, Strategy and Plan of Action to control Iodine Deficiency Disorders in Bhutan: The National IDD Control Programme in Bhutan	1985
4.	Situational analysis of the salt iodisation programme in Bhutan	1986
5.	A nationwide internal programme evaluation of IDDCP	1992
6.	Iodine Deficiency Disorders in Bhutan: Extent and severity	1996
7.	Statement signed by His Holiness the Je Khenpo, a spiritual leader	1997
8.	Introduction of annual cyclic monitoring	1998
9.	Sustainable elimination of IDD	2002

Contribution of the All India Institute of Medical Sciences to IDD elimination in india and south east asia

Salient Contributions of the All India Institute of Medical Sciences (AIIMS), New Delhi to the national iodine Control Programmes in India

1.	Kangra Valley Study - pioneering community based study to assess effectiveness of iodised salt.	1956-1962
2.	Launching of the National IDD Control Programme in India (based on the results of the Kangra Valley Study)	1962
3.	Evidence of severe iodine deficiency from the terai (plains) regions in the Himalayas	1974-1983
4.	Pilot Programme to screen neonates for hypothyroidism using the filter paper thyroxine technique using traditional Birth Attendants.	1982
5.	Policy decision to implement a strategy of Universal Salt Iodisation (USI) in India (based on the evidence from the terai region)	1984
6.	ICMR Multicentric All India study to assess IDD status	1984-1986
7.	Independent survey evaluation of USI in New Delhi & Sikkim	1991-1998
8.	Independent survey evaluation of USI in Madhya Pradesh	1995
9.	Tracking progress towards sustaining elimination of Iodine Deficiency Disorders in Kerala, India	2001
10.	Tracking progress towards sustaining elimination of Iodine Deficiency Disorders in Tamil Nadu, Orissa, Bihar, Goa	2002-2003

Salient Contributions of the All India Institute of Medical Sciences (AIIMS), New Delhi to Regional IDD Control Programmes In Collaboration With International Agencies

1.	Endemic goitre survey by WHO Consultant Prof V Ramalingaswami in Thailand	1955
2.	Endemic goitre survey by WHO Consultant Prof V Ramalingaswami in Myanmar (Burma)	1957
3.	Endemic goitre survey by WHO Consultant Prof V Ramalingaswami, Prof M G Deo and Prof M G Karmarkar in Nepal	1968
4.	Endemic goitre survey by WHO Consultant Prof M G Deo and Prof T A V Subramanian in Sri Lanka	1970
5.	UNICEF/WHO project on Iodine Deficiency Disorders in Bhutan – Prof N Kochupillai, Prof M G Karmarkar, Prof M M Godbole, Dr Chandrakant S Pandav	1983
6.	Tracking progress towards elimination of Iodine Deficiency disorders in Nepal – Prof V Ramalingaswami, Prof M G Karmarkar, Prof L M Nath, Prof N Kochupillai, Prof M M Godbole, Dr Chandrakant S Pandav	1985
7.	Iodine Deficiency Disorders in China: Current status, control measures and future strategy – Prof N Kochupillai, Dr Chandrakant S Pandav	1985
8.	UNICEF/WHO/ICCIDD project on tracking progress towards sustainable elimination of IDD in Bangladesh – Dr Chandrakant S Pandav, Prof M G Karmarkar	1992
9.	UNICEF/ ICCIDD project on tracking progress towards sustainable elimination of IDD in Maldives–Dr Chandrakant S Pandav	1995
10.	UNICEF/WHO/MI/ICCIDD project on tracking progress towards sustainable elimination of IDD in Bhutan - Prof M G Karmarkar, Dr Chandrakant S Pandav, Dr N K Arora	1996
11.	UNICEF project on tracking progress towards sustainable elimination of IDD in Thailand - Prof M G Karmarkar, Dr Chandrakant S Pandav, Dr N K Arora	1997
12.	MI/ICCIDD project on Iodine Deficiency Disorders Elimination Programme in Indonesia - Dr Chandrakant S Pandav	1997

Annual cyclic monitoring of indicators to tracking progress toward Iodine Deficiency Disorders elimination in Sri Lanka, 2001-2003

Dr. Renuka Jayatissa*

Sri Lanka is an island with a population of approximately 18.7 million. The island stretches to a maximum length of 435 kilometers, and a width of 225 kilometers. It comprises a mountainous area in the south-central region ranging in elevation from about 3000 to 7000 ft. The coastal plain occupies the rest of the island, being narrower in the west and south but broadening out in the east and north. The climate of Sri Lanka is tropical. The annual average rainfall varies from below 1000mm over the Northwest and Southeast of the island to over 5000mm on the southwestern slopes of the central hills. For purposes of administration, Sri Lanka is divided into 9 Provinces and 25 Districts.

Several studies were carried out in Sri Lanka prior to the implementation of iodised salt in 1995. To monitor the salt iodisation programme, urine iodine and salt iodine laboratories were established at the Nutrition Department in the Medical Research Institute (MRI) in 2000 with the assistance of UNICEF.

The study was conducted in 2000-2001 by the MRI to evaluate the process and impact at Provincial level. The following conclusions and recommendations were drawn from that study. As recommended by WHO/UNICEF/ICCIDD, the total goitre prevalence rate (TGR) of 20.9% in 2000-2001 suggests the presence of endemic goitre as a public health problem in Sri Lanka. As demonstrated by median urinary iodine (UI), the current iodine nutritive status is possibly adequate in all the provinces, the exception being the Uva province. Uva province showed a mild degree of iodine deficiency. It was found that the proportion of households with intake of salt with adequate levels of iodine was inadequate. Another important observation was the wide variation in the iodine content of the different brands of salt available, both between brands and within a given brand. Inadequate coverage in the monitoring of retail outlets by the health personnel was also found.

Findings of the National study were made public in March 2001. A Consultative meeting was held in July 2001 to develop the work plan on iodine control. A briefing session was conducted with salt producers at the end of 2001. In the meeting it was agreed that the regular quality control of iodine concentration in salt at the point of production, for each batch, by using titration method is essential. UNICEF agreed to

support this activity. The Ministry of Health agreed to prepare the guidelines and forms for monitoring and assessment of iodised salt.

With the median urinary iodine level being adequate in all but one province, the legislation on salt was revised by the Ministry of Health in the year 2003. The new law mandated a salt iodine level of 15 ppm at the household level.

Sri Lanka is undergoing a phase in its IDD elimination programme where the total goitre prevalence is high and the urinary iodine excretion is on the increase, a state being experienced by many countries in the region. This indicates the need to make iodine available on a regular and continuous basis. Therefore, a "cyclic monitoring" of indicators for tracking the progress with respect to the elimination of IDD as a public health problem has been initiated from year 2001. In "cyclic monitoring", Sri Lanka is divided into five areas, 4 - 5 districts being included in each area. Every year one area is being assessed for monitoring; in a five year monitoring cycle all the districts (4-5 districts per year) will be covered. It was decided to monitor the following indicators annually: total goitre prevalence in a representative sample of school age children, urinary iodine levels in a representative sample of school age children, and the household iodised salt consumption. As an add on, iodine levels in drinking water were also measured.

The iodine deficiency status in different districts of Sri Lanka during the annual cyclic monitoring from 2001-2003, according to the WHO/UNICEF/ICCIDD criteria, is presented in the following Table, based on the findings of the study. Median urinary iodine concentration ranged from 10.8 - 1291.4 mg/L in different districts. Taking the prevalence of goitre and median urinary iodine levels as the indicators, iodine status among school children in Colombo, NuwaraEliya, Ampara and Vavuniya districts could be considered as satisfactory.



In other districts urine iodine status is optimum. Household iodine level of salt is still not adequate which was estimated in only one district. It ranged from 1.5 to 264.0 ppm (mg/kg)

IODINE DEFICIENCY STATUS IN DIFFERENT DISTRICTS OF SRI LANKA DURING THE ANNUAL CYCLIC MONITORING FROM 2001-2003, AS PER WHO/UNICEF/ICCIDD CLASSIFICATION

Place	Indicators		
	Goitre by palpation iodine (mg/L) - Comments (>15ppm)	Median urinary adequately iodised salt (>15ppm)	Household iodine salt % - Comments
Colombo	1.0 - Normal	258.1- More than adequate	-
NuwaraEliya	2.8 - Normal	120.6 - Ideal	66.4 - Inadequate
Hambantota	5.8 - Mild	200.7 - More than adequate	-
Ampara	0.7 - Normal	223.7 - More than adequate	-
Vavuniya	4.1 - Normal	276.8 - More than adequate	-
Kurunagala	7.2 - Mild	195.6 - Ideal	-
Anuradapura	6.0 - Mild	255.5 - More than adequate	-
Polonnaruwa	8.9 - Mild	236.3 - More than adequate	-
Badulla	11.3- Mild	125.5 - Ideal	-
Monaragala	7.4 - Mild	154.0 - Ideal	-
Ratnapura	5.9 - Mild	216.8 - More than adequate	-


Colombo, Nuwara, Eliya, Ampara and Vavuniya districts in Sri Lanka has achieved the goal in eliminating IDD as a public health problem as indicated by urinary iodine levels and the prevalence of goitre. The wide variation in the iodine content in the salt samples at household level indicates the need for improving the quality of salt iodisation and the need for regular monitoring of the process of iodination and the monitoring at the level of manufacture and at household level.

**Dr. Renuka Jayatissa, Department of Nutrition, Medical Research Institute, Colombo.*

Events:

- 1 National Workshop on Micronutrients, 24th – 25th November 2003, Essex Farms, New Delhi – Organized by the Indian Council of Medical Research (ICMR), New Delhi.
- 2 ICCIDD Satellite Symposium, 7th Asia and Oceania Thyroid Association Congress - 2nd December 2003, at the Raffles City Convention Centre, Singapore
- 3 Constitution of a Committee by the Ministry of Industry and Commerce to review progress towards universal salt iodisation – 4th December 2003
- 4 National Consultation on Food Fortification in India – Why the Stalemate?, 15th – 16th December 2003, Hotel Claridges, New Delhi – Organized by the Nutrition Syndicate, New Delhi
- 5 Training Programme for Laboratory Personnel of the Chennai Region of the Salt Department, Government of India - 6th to 9th January, 2004 at Tuticorin, Tamil Nadu
- 6 " Tracking Progress towards Sustainable Elimination IDD in Orissa ", Academic Session held on 25th January 2004 at the 48th All India Annual Conference of Indian Public Health Association, Bhubaneshwar.

Lighter vein



"Hi, there, Doctor!"

"Hi,"

"What are you doing with this IDD elimination programmes? It is doing us, the farmers, harm."

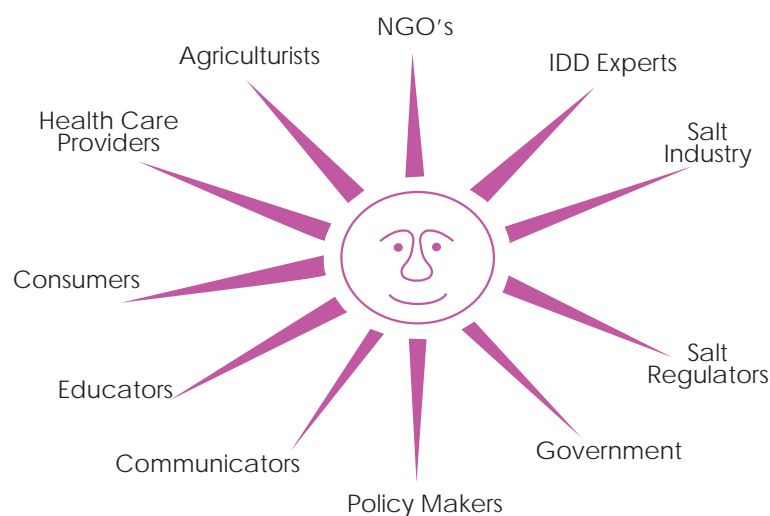
"Harm? What?!"

"Yes. We had the folks from the hills working for us so long. Earlier there were no thefts. Now that after your salt iodisation programme, there are incidences of theft at our farms. And it is sustaining and increasing. "

56TH Session of the WHO Regional Committee for South-East Asia

56th Session of the WHO Regional Committee for South-East Asia was held in New Delhi from 10-13 September, 2003. This was attended by representative of all the eleven Member States of the region, UN and its agencies, non-government organizations, as well as observers. On behalf of ICCIDD Dr. Chandrakant S. Pandav, Regional Coordinator, South Asia Region, ICCIDD, made a statement. Excerpts are given below:

"ICCIDD is a non-profit non-governmental organization dedicated to sustainable elimination of IDD throughout the world. It has the mandate to collaborate with stakeholders and has pledged its technical expertise to assist Member Countries in tracking progress towards sustainable elimination of iodine deficiency disorders. There had been significant achievements in the South East Asia (SEA) Region in sustaining elimination of iodine deficiency disorders, and the availability of adequately iodized salt to the population has been encouraging. It is essential to ensure the provision of daily iodine requirements to every mother and child. ICCIDD looks forward to working in close collaboration with the Member Countries, along with partner agencies, towards sustainable elimination of iodine deficiency disorders".



Sustaining Elimination of IDD



Publishing any material in IQ+ Jagriti does not necessarily mean ICCIDD's endorsement of the views expressed therein or the results quoted.

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