Scaling Up Nutrition Interventions: Key Learning and Challenges

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Dr. Sheila C. Vir,
Consultant
&
Director, Public Health Nutrition and Development Centre
Nutrition Intervention: An Overview of Phases
IMPROVING FOOD & NUTRITION INTAKE PHASE:

1960-1970
- Applied Nutrition Programme
- Green Revolution
- Addressing Protein Gap – PEM - Kwashiorkar and Marasmus

CLINICAL PHASE: Research and Policy Formulation

1970’s
- National Vitamin A Programme for Prevention of Blindness
- National Nutritional Anaemia Prophylaxis Programme (NNAPP)
- Nutrition Goitre Control Programme (NGCP)

SUPPLEMENTARY NUTRITION PHASE:

1975
- Launch of ICDS - Focus on SNP, GMP

MICRONUTRIENT PROGRAMME PHASE:

1990
- Nutrition Policy Breastfeeding Promotion (BFHI, IMC Act)
- USI, VAS (biannual strategy), Food Fortification Initiatives
UNDERNUTRITION REDUCTION PHASE:  
2003 to date  
- SAM-Institutional Management Operational Policy  
- VAS,USI Implementation contd.

SCALING UP PHASE: HOLISTIC APPROACH (Below 2years):  
2007 to date  
- Direct Nutrition Actions (Selected Interventions-- IYCF,MN, Adolescent and Pregnancy Nutrition care, SAM management)  
- Nutrition Influencing Actions (Agriculture, WES, Women’s status)  
- Weekly IFA for Adolescent girls (WIFS)  
- Food Security Act
Current Nutrition Scenario
Reduction in Clinical Deficiency Among Preschool Children

SOURCE: NNMB, 2012
Stunting & Underweight Among Children Under 5s, BRICS

SOURCE: Kathuria AK, 2011
Global Scenario: Undernutrition

SOURCE: UNICEF, 2009
Trends in Undernutrition in Children (<3 years): India

SOURCE: NFHS 3, 2005-06; NFHS 2, 1998-99
Stunting, Underweight & Wasting in Children < 5 by Household Wealth

SOURCE: Kathuria AK, 2011
Stunting, Underweight & Wasting in Children < 5 by Caste / Tribe

Source: Kathuria AK, 2011
Undernutrition: Underweight in Children (Statewise)

SOURCE: NFHS 3, 2005-06
Undernutrition: Stunting in Children (Statewise)

SOURCE: NFHS 3, 2005-06
Trends in Undernutrition in Women (Wealth Quintile)

SOURCE: NFHS 3, 2005-06
Nutrition Intervention Programs
Programmes Being Scaled Up

- Vitamin A Supplementation Programme (VAS)
- USI/National Iodine Deficiency Control Programme (NIDDCP)
- Infant And Young Child Feeding (IYCF)
- Supplementary Nutrition Programme (SNP),
- Severe Acute Malnutrition (SAM), (Institutional management)
- Weekly IFA Supplementation Programme (WIFS)
Scaling Up: Key Learnings

- **Micronutrient Supplementation Programme** - Vitamin A Supplement Administration Programme

- **Food Fortification Programme** - Universal Salt Iodization

- **Behaviour Change At Family Level** - Infant and Young Child Feeding
VAS – Scaling Up Experience
Vitamin A Supplementation Programme

- **PHASE 1** - Launch of Vitamin A Programme for Prevention of Blindness, 1971

- **PHASE 2** – Revision of Policy --Integration of Vitamin A Programme with child survival efforts, 1991

- **PHASE 3** – Acceleration of Vitamin A Supplement Programme: Experimenting Biannual VAS Delivery Model, 2000

- **PHASE 4** – Establishing comprehensive : Biannual Child Health and Nutrition Programme
Vitamin A Supplementation Programme: Scaling Up Cycle

- VAD Clinical
- Dormant Phase
- Multi Country Research - impact on U5MR
- Revised Policy, 1991 (inclusive of 6-11 months children)
- Implementation In Selected States (7-13 states)
- Part of CSSM Package
- Integral Part of NRHM - 10th FYP
- Biannual Strategy - UP state (fixed monthly)

Focus on reducing blindness.
Scaling up processed.
Focus on reducing mortality.

Policy Massive Dose Programme 1970
Evaluation (1978)
Scaling Up Phase – 2002 State Plan of Action
Scaling Up: Global Evolvement of VAS Programme Design

- VAS piggy - packed to ongoing National Immunization Week
- VAS linked to Polio NIDs
- Micronutrient Days established - six months apart
- Intensive Vitamin A Campaign Week
- VAS linked to routine Immunization programme - scaling up plan
Vitamin A Supplement Strategy: Global Overview

- Fixed site + outreach: 14%
- Fixed site: 17%
- Child Health Days: 23%
- Polio national/subnational immunization days: 26%
- Micronutrient event: 15%
- Measles supplementary immunization activity: 5%

SOURCE: Vir S., 2012

Health System

- Sharing Microplan
- Services RI Session Days
  - Vitamin A (9-36mths.)
  - Routine Immunisation
  - Management of Severe Malnutrition

ICDS System

- Biannual surveys
- Identification of beneficiaries < 3yrs (Apr/Oct)
- IEC & Social Mobilisation
  - VAS + RI
  - BF + CF (IYCF)
  - Iodised Salt Consumption

Children < 3 years
Programme Design

- Biannual- fixed two months strategy
- Not stand alone intervention
- Biannual Child Health Nutrition months - not limited to VAS alone
- Built on the existing health-ICDS programme system (*no campaign approach*)
- Roles of health and ICDS defined
- Benefits of strategy towards achieving sector specific goal emphasized (*identifying beneficiaries, improving RI micro-plan*)
- Joint Health - ICDS Training - tasks and output oriented
- Supply and logistics management streamlined
- Social mobilization and IEC Drive
- Monitoring system established
- Evaluation built in design
Vitamin A Supplementation

SOURCE: UNICEF, 2004-05
VAS Programme – Scaling Up: Emerging Lessons For Success

- Intensive Advocacy – evidence – state survey—political support critical
- Ownership by concerned sectors ensured - role of health/ICDS defined
- Programme design
  - strategy built into the ongoing program systems
  - emphasis on programme and not project
  - accountability of each action specified
  - program design not a load on the system-sustainability
  - expected impact of program inputs linked to sector specific actions highlighted
  - social mobilization activities: planned for creating demand and community ownership
- Implementation process ,including training ,monitoring and scaling plan spelt out. Not a one time scaling up design
- District level Technical / managerial support ensured (district officers)
- Maintained momentum – motivation and feedback of monitoring - at every level
Have we applied these Key Lessons of Success of VAS to IFA Programme for Pregnant women?

- **Advocacy?** Evidence on significance and benefits highlighted? Efforts for increasing “visibility” adequate and intensive?

- **Positioning of IFA satisfactory?** Reference to diet issues, maternal mortality, birth weight, implications on intergeneration cycle of ill health and undernutrition?

- **Increase awareness?** e.g. In controlled trials, have we emphasized that appropriate iron supplementation in pregnancy shown to reduce anaemia in mothers overall by 66 per cent at delivery and reduce the incidence of LBW by 19 percent?

- **Dissemination of positive lessons learned from other countries –** Nepal, Vietnam, Thailand?
Contd…

- **Feedback of ICMR evaluation** – limited to policy reformulation only

- **Scaling Up plan** – Well designed comprehensive district plans of action. Implementation process built in, including programme issues from supply to mechanism for tracking progress?

- **Maintain momentum at every level** Build constituency networks and alliances?


- **Who leads the process of moving forward** - A catalyst required. Donor catalysing actions?
Scaling Up Food Fortification Programme: Universal Iodization of Salt - NIDDCP
GOITRE Problem - identified as public health problem

Kangra Valley Research, 1955

Policy NGCP (Iodized salt), 1962

Endemic regions implementation only. Nationally scaled up 1986


Scaling up 1992 onwards – state plan of action

Momentum maintained

Wholesalers mapped and involved, 2002

Equity issue addressed (PDSI, ICDS)

Consumption of iodized salt significantly improved 2009

Intensive advocacy
Legal measures / PFA
Technology (STK)
IEC – Sun Logo
Global event, World Summit, WHO Association, Hidden Hunger Meet
Policy of private sector involved – intensified 1983 onwards

Renamed- NIDDCP, 1992

NFHS 3 survey
Cost of Iodization

- Iodisation: 2%
- Common salt: 11%
- Polybags & packaging: 26%
- Rail freight & Dist. to retail: 28%
- Wholesalers and retailers margin: 33%
Checking Iodine Levels

- Titration method
- Salt testing kits (STK)
Iodized Salt – IEC & Social marketing

‘Smiling sun’ logo
Target & Production of Iodized Salt (Million Metric Tonnes)

SOURCE: Vir S., 2012
Trend In Iodized Salt Consumption

SOURCE: CES, 2009
% Distribution with Iodized Salt Consumption according to Wealth Quintile

SOURCE: NFHS 3, 2005-06
Emerging Lessons: Scaling Up Salt Fortification

- IDD “Invisible” Problem – Evidence - Awareness generated
- Production cost, capacity, transport mechanism documented
- Production guidelines on salt iodization developed
- USI part of NIDDCP-- Nomenclature and Programme design revisited—consensus experts
- Intensive Advocacy - Political priority - Legal Ban – PFA at state level
- Moving from Health Dept to Salt Industry and Salt department
- Focused on role of Salt Commissioners Office – USI Goal - ownership by Salt Dept
Emerging Lessons: Scaling Up Salt Fortification

- Stakeholders consensus at state level
- Active involvement Ministry of Industry
- Role of health department re-defined
- Reaching the unreached- Involvement of PDS critical
- Advocacy with private salt producers –Resources mobilized
- Community Informed - Significance and Entitlement
- Established system of monitoring - use of STK promoted
- Human resource developed –spearheading national/state level actions
Behaviour Change Intervention At Family Level:
Infant & Young Child Feeding (IYCF)
Infant & Young Child Feeding (IYCF)

1970s
- Introduction of Supplementary Nutrition Programme (SNP)
- Breastfeeding (BF) Promotion
- BFHI

- ICDS--Information and Communication campaign
- Infant Milk Substitute Act – IMS Act

- Improving SNP Supply
- IYCF Policy

2013
- Revised policy, DWCD and Operative plan, HFW—BF and CF

2000 onwards
- Vision created-role of IYCF in child survival—BF/CF
- Programme tools introduced (MCP Card)
- Innovative strategy experimented - PD, MCHN, DULAR
- Demonstrated use of SNP

- Goal /Vision?
- Programme design?
- Operational Plan?
- Dissemination – Global evidence….implications
- BF and Child survival, CF and Growth
Implementation of IYCF Programme—Gaps

- Mass Communication
- Scaling Up Issues?
- Higher focus on Supplementary feeding, lack of food
- Complementary feeding – emphasis inadequate
- Diversified food – a constraint – consensus?
- BCC - IPC - Community Based experimented – Lessons learned adopted??
- Training - action and expected outcome based??
- Monitoring Indicators Specific / ADEQUATED BUDGET for IPC??
- Incentive schemes (IGMSY) - rolling out plan not clear
Implementation of IYCF Programme--2005 onwards

IMPLEMENTATION

- Advocacy - Political commitment/Policy
- Positioned – Immediate cause - Conceptual framework
- Targeted population defined - Focus on Under twos
- Emphasized specific input & monitoring elements of IYCF
- Built Consensus - Stakeholders

PROGRAMME DESIGN: Enabling Environment

- Focus on under twos families – IPC
- Health spearheading - ICDS collaborates
- Messages standardized for health - ICDS – Joint MCP cards
- Mass communication strategy - TV spots
- Training standardized - rationale and IPC skills emphasized
- Monitoring linked to health and ICDS systems
Annual Health Survey Data on Breastfeeding Practices in Selected 9 States, India

SOURCE: AHS, 2010-11
India: Poor Feeding Practices in Children Under Two

Source: NFHS 3, 2005-06
Breastfeeding and complementary feeding - Chattisgarh state

% started breastfeeding within 1 hour of birth

% who fed colostrum to the child

% fed appropriate no. of food groups (6-23 m)

SOURCE: CES, 2009
Chattisgarh IYCF Strategy

What Facilitated In The Scaling Up Process

- High political commitment - State Food and Nutrition Act
- Adequate State financial and human resources
- Effective Programme design
- Health sector took the lead - SHRC technical wing
- Mitanin (Community Health Volunteers) strategy – Community ownership in selection
- Mitanin ratio (1:250-500 families) facilitated in frequent contacts and effective counselling
- Supervision mechanism established
- Capacity building an on-going activity
- Community participation / mobilisation high priority
Scaling Up Direct Nutrition Actions
# Essential Interventions To Reduce Malnutrition in Infants & Young Children

## Related to IYCF
- Early initiation of breastfeeding (BF)
- Exclusive BF
- Timely introduction of complementary feed (CF) and continued BF
- Age appropriate CF
- Safe handling of CF, including hand washing, avoiding feeding bottles, clean utensils
- Active feeding during and after illness, oral rehydration with zinc supplementation during diarrhoea
- Therapeutic feeding for severe acute malnutrition cases

## Other Interventions
- Full immunization and biannual vitamin A supplementation and deworming for 6-59 months
- Improved nutrition care of adolescent girls, including weekly IFA supplements and biannual deworming, measures to prevent early marriage and pregnancy
- Improved food and nutrient intake for adult women, including during pregnancy and lactation
Scaling Up Requires

**Effectiveness**
- A solution that works

**Efficiencies**
- Finding a way to deliver a solution at an affordable cost

**Expanding**
- Develop a way to provide the solution on a larger scale

**Scaling Up Not A Time Event:** Scaling up expands, replicates, adapts and sustains successful policies, programmes or projects to reach a greater number of people. It is a part of a broader process of innovation and learning.
Coverage of Essential Interventions to Reduce Stunting

SOURCE: Menon P and Aguayo V, 2011
Key Observations Of Scaling Up: Key Learning

- **Policy exists** for almost all critical nutrition interventions - “How” often not defined

- **Sense of complacency** in implementation of policies

- **Single nutrient focus** - Linkage to existing system and programme not well defined

- **One time scaling up effort** - limited to geographical area - no plan for extending coverage and sustaining momentum

- **Evaluation findings** not always used for moving forward with expansion - a long dormant phase

- **Global event / donor support**: plays a critical role in take off stage – donor exit plan and scaling up plan often missing

- **Momentum of Scaling**: important to ensure all core issues/processes approved with no additional clearance required once scaling up momentum in place

- **Shortage of adequate resources, including human resource**: lack of public health nutritionists - a major constraint
At the 65th World Health Assembly in May 2012
Global Goals - WHO

Maternal, Infant and child Nutrition: six global targets to be achieved by 2025

- 40% reduction of the global number of children younger than 5 years who are stunted
- 50% reduction in anaemia in women of reproductive age
- 30% reduction of low birth weight
- No increase in childhood overweight
- An increase the rate of exclusive breastfeeding in the first 6 months to at least 50%
- A reduction in childhood wasting to less than 5%

SOURCE: WHO 2012 Maternal, infant and young child nutrition (WHA 65.5) Geneva, World Health Organisation
Scaling Up Implementations: Critical Factors

- State goals and objectives
- Focus on both Direct and Indirect Nutrition Influencing actions
- Reach under ones including pregnant women and newly weds—highest priority
- Build evidence: Critical for increasing “visibility”
- Strong advocacy - ensure financial commitment
- Phase implementation for scaling - Priority districts (200 in 1st phase)

- Operation plan - Use of existing systems (Health, ICDS, PDS, Education, WES): Ensure ownership of defined single goal with clarity in roles and responsibilities of each sector
- Scaling up part of program design - shift from project to programme mode (balance supply and demand for scaling up, sustainable, phasing up time plan)
Scaling Up Implementations: Critical Factors

- Political commitment - allocation of adequate resources
- Community ownership critical - social mobilisation, IEC, mass communication
- Build constituency: Prevent dormant phase - networks and alliances critical for momentum
- Programme design – sustainable – built on strong systems
- Mechanism for monitoring progress and tracking performance: Simple doable indicators
- Disseminating Information on Progress - Keeping the momentum on. Prevent dormant phase - strategy in place – survey /workshops
- Donor funding - part of approved scale up plan with withdrawal and expansion plan defined
Challenges & Moving Forward
Link between UNICEF Conceptual Framework & Direct / Indirect Interventions

Adapted from UNICEF 1990
Source: Ruel, SCN News 2008
Prevalence of Undernutrition in Children < 5 years in India

SOURCE: NFHS 3 2005-06
Scaling Up with Quality and Equity: Direct and Indirect Interventions

- Focus on under two children (under one?) and their mothers
- Reach the unreached

- Estimate required for scaling direct nutrition actions - *global* estimate for world-wide coverage US $ 10.3 billion

- Political commitment – Enhance financial resources

- Continuously build and disseminate evidence - keep the momentum - *Periodic Dietary and Nutrition Surveys* - not limited to selected states

- **Build state level cadre of public health nutritionists** - skills to adapt innovations, delivery and scaling up interventions
We must act now

Thank you