



The USAID
Micronutrient and
Child Blindness Project



**Experiences and lessons-learned from the integrated program for
maternal anemia reduction in two states of
Uttar Pradesh and Jharkhand, India**

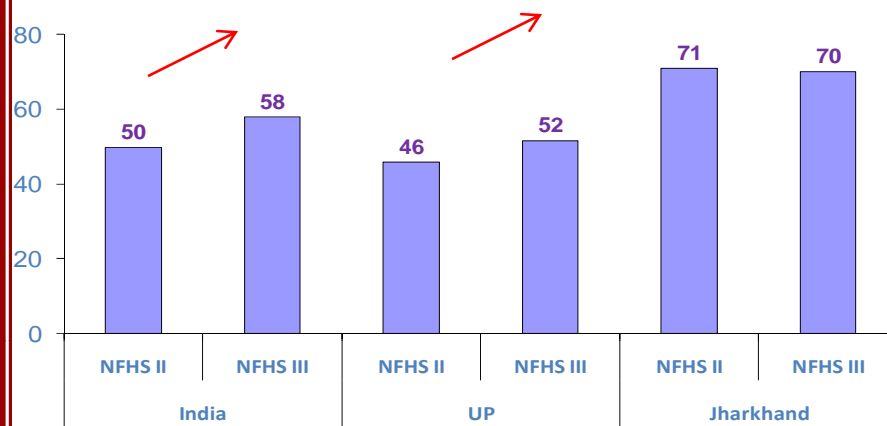
Prakash Kotecha

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Chandra Mishra, Praveen Sharma, Vishwajeet Pankaj, Mini Rozario
&

Nadra Franklin, Linda Tawfik, Lidan Du, Zo Rabeloson, Rolf Klemm,
Omar Dary, Phillis Kim, Morgan Hillenbrand,
A2Z Project, India



Why Anemia and Why Uttar Pradesh & Jharkhand, India?



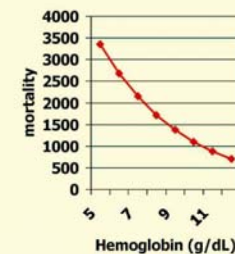
Source: NFHS II 1998-99 NFHS III 2005-06

- One in five maternal death is attributed to iron def anemia.
- In UP MMR **440/100,000**
- Jharkhand MMR **312/100,000**
- In the two states alone 77 maternal deaths every day
- **15 of them due to anemia...**
- 30 times these figures are facing serious morbidities

	UP	Jharkhand
Population (2011)	199 million	32 million
Districts	73	24
Anemia in pregnancy	52%	70%
Among highest SES group	46%	67%
Three Antenatal checkups	36 %	36%
Mothers who consumed IFA for 90 days	9%	11%
Source: NFHS III		

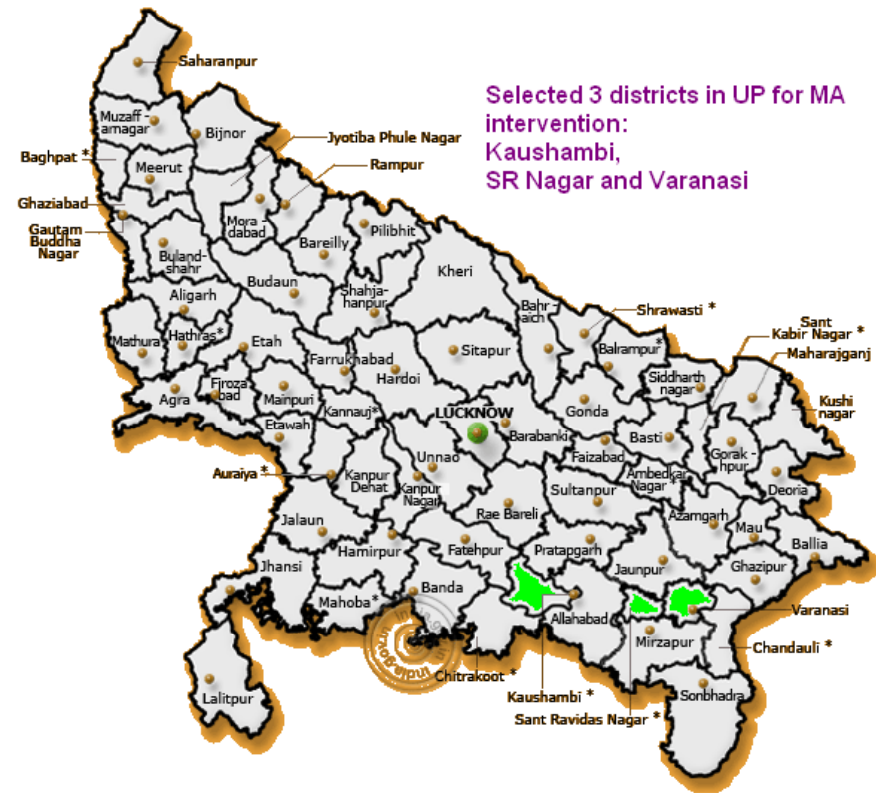
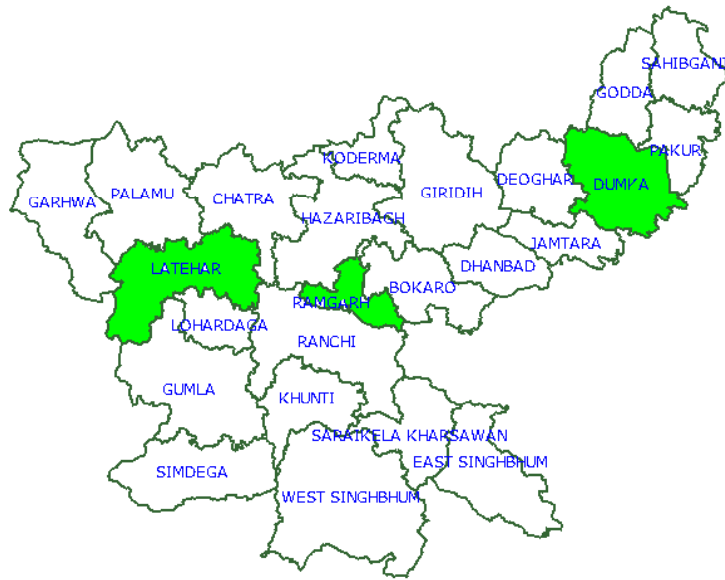
Pregnancy anemia is strongly related to maternal and perinatal mortality

- The risk relationship is continuous
- Not just a problem of severe anemia



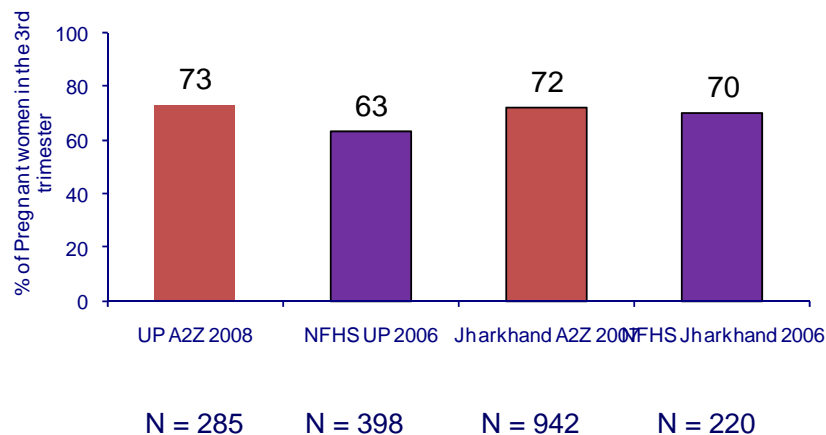
Source: Disease Control Priorities 2

Jharkhand & UP State: A2Z Districts for Maternal Anemia

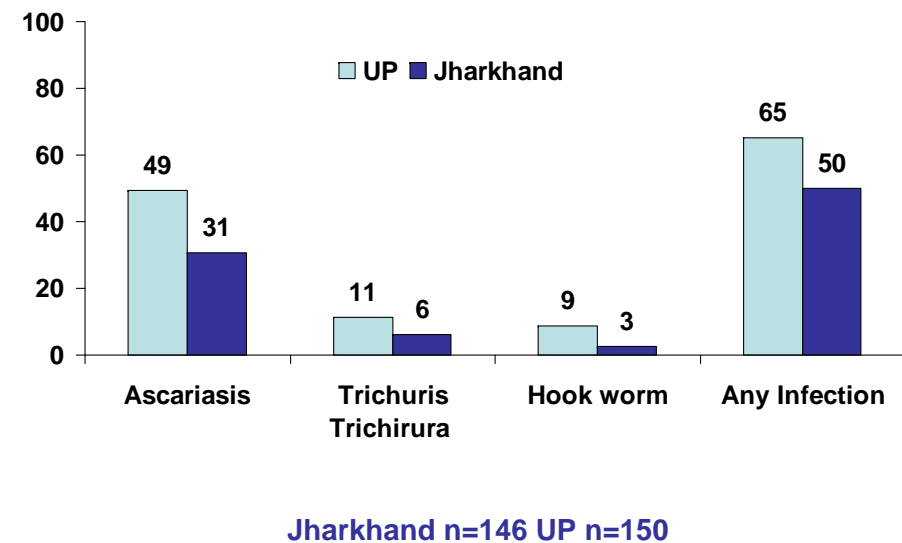


High Prevalence of Anemia and STH Infection in UP & Jharkhand as compared to State

Anemia in UP & Jharkhand



STH Infection in UP and Jharkhand



Source: Awasthi S et al, 2007

A2Z APPROACH FOR MATERNAL ANEMIA CONTROL

Technical Assistance for Maternal Anemia Reduction

- Policies & Guidelines; RCH/ICDS roles and liaison, HMIS use, resources. (state level)
- Capacity Building of front line workers and MO with the tools to support them and providing technical assistance
- Systems Strengthening: Supplies, planning denominators, provider skills, records, use of data. (state and selected districts)
- Community & BCC: Village Health & Nutrition Days, home visits, print and broadcast media, community groups and leaders, local events, folk and street plays.
- M&E: Baselines, routine data, Mid Project Surveys and End-line surveys
- **District and Block Level Consultant + Mentors**

Partners: Medical Colleges, NGOs, UNICEF, MI



स्वस्थ झारखण्ड सुखी झारखण्ड

अपने आने वाले शिशु को बलवान बनाएं



गर्भावस्था में खून की कमी से बचने के पाँच उपाय



गर्भधारण होते ही गाँव की नर्स दीदी को बताएँ और प्रसव पूर्व जाँच कम से कम तीन बार करवाएँ।



चौथे महीने से एक आयरन की गोली कम से कम 100 दिन तक हर रोज खाना खाने के 2 घंटे के बाद खाएँ।



चौथे महीने के बाद एक बार कृमिनाशक दवाई जरूर खाएँ।



सामान्य से अधिक आहार खाएँ और आंगनबाड़ी से मिलनेवाला पूरक पौष्टिक आहार जरूर खाएँ।



मलेरिया से बचने के लिए सोते समय मच्छरदानी का प्रयोग करें व घर और आस-पास सफाई रखें।



USAID
FROM THE AMERICAN PEOPLE

AED
Ideas Changing Lives



June 13, 2011

Prakash Kotecha

Studies

- Baseline (2007 Jharkhand 2008 UP)
- Mid Project Monitoring Survey (2009)
- Endline (2011)

Districts with Blocks for UP				Districts with Blocks for Jharkhand			
District		Intervention Blocks	Non-intervention Blocks	District		Intervention Block	Non-intervention Blocks
Kaushambi	1	Sarsawan	Manjhanpur	Dumka	1	Raneshwar	Gopikandar
	2	Mooratganj	Kanaili		2	Saraiyahat	Jama
	3	Sirathu	Chayal		3	Kathikund	Jarmundi
			Newada				Masalia
			Kada				Ramgarh
Varansi	1	Araji Lane	Kashi Vidyapeeth	Latehar	1	Balumath	Barwadih
	2	Cholapur	Chirai Gaon		2	Chandwa	Garu
	3	Sewapuri	Harahua		3	Latehar	
			Bada Gaon				
			Pindara				
S.R.Nagar	1	Gyanpur	Deegh	Ramgarh	1	Mandu	Patratu
	2	Bhadoi	Aurai		2	Gola	
	3	Suryawan			3	Ramgarh	

Field Surveys Measuring Anemia

- For each state 31 cluster sampled PPS and then 10 mothers from each cluster (n=310 for CPW and RDW total n=620) was planned with expected design effect of 2 reduction of anemia 15%. (Baseline and Endline)
- Ethical Committee approved : US and India
- HemoCue Machine (301) was used for measuring hemoglobin level with lancet needle.
- Qualitative Study (FGD for ANM, AWW and beneficiaries mothers with high and low compliance)

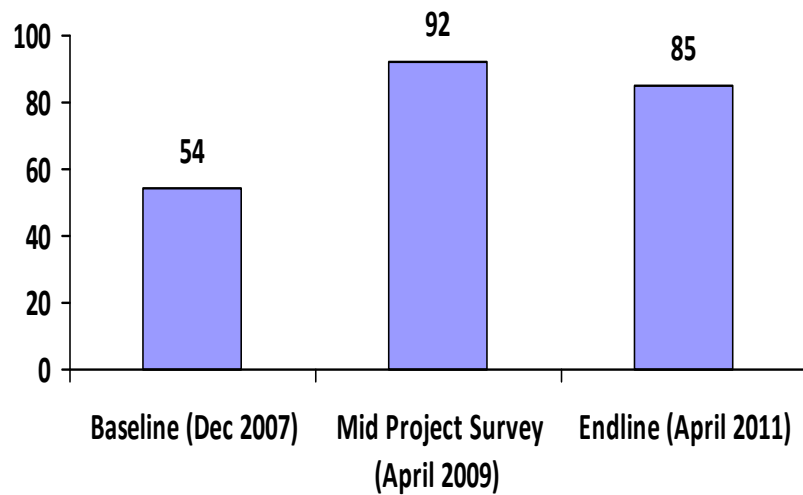


Results for Process Indicators

Maternal Anemia ANC Coverage

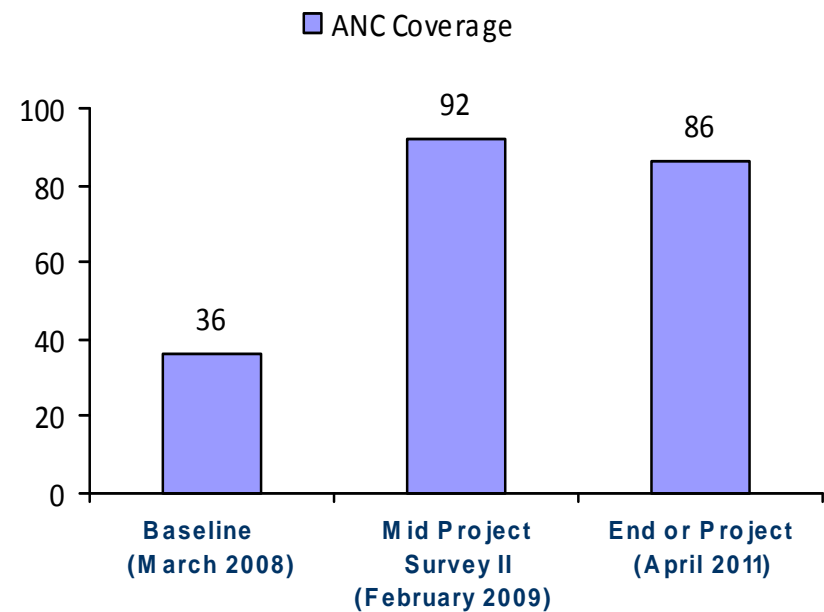
Jharkhand

Improved ANC
over 1.5 times
to 85%



UP

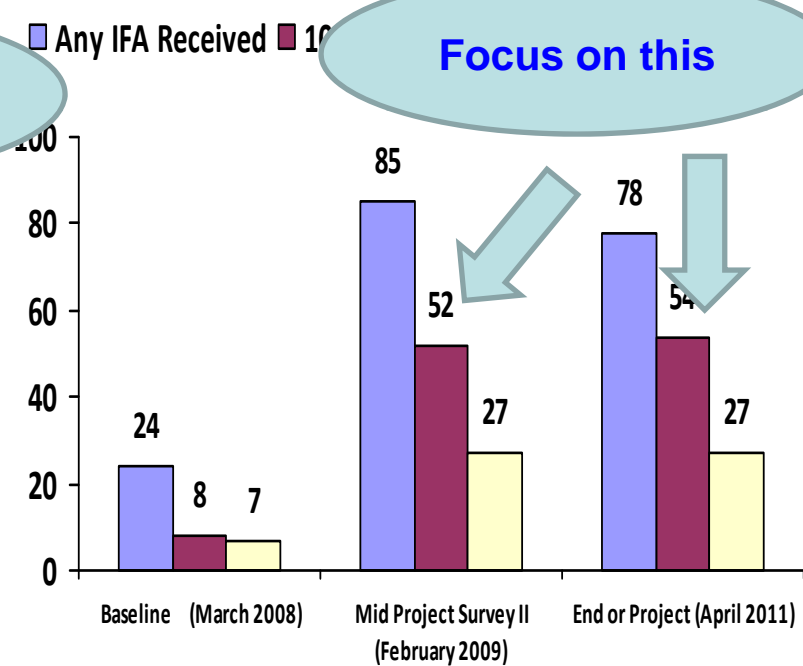
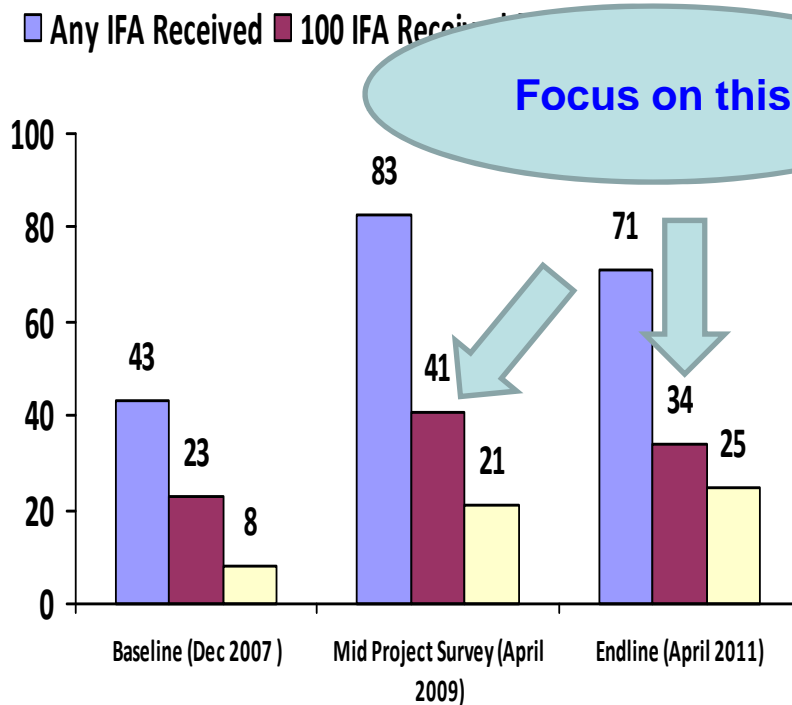
Improved ANC over
2.2 times to 86%



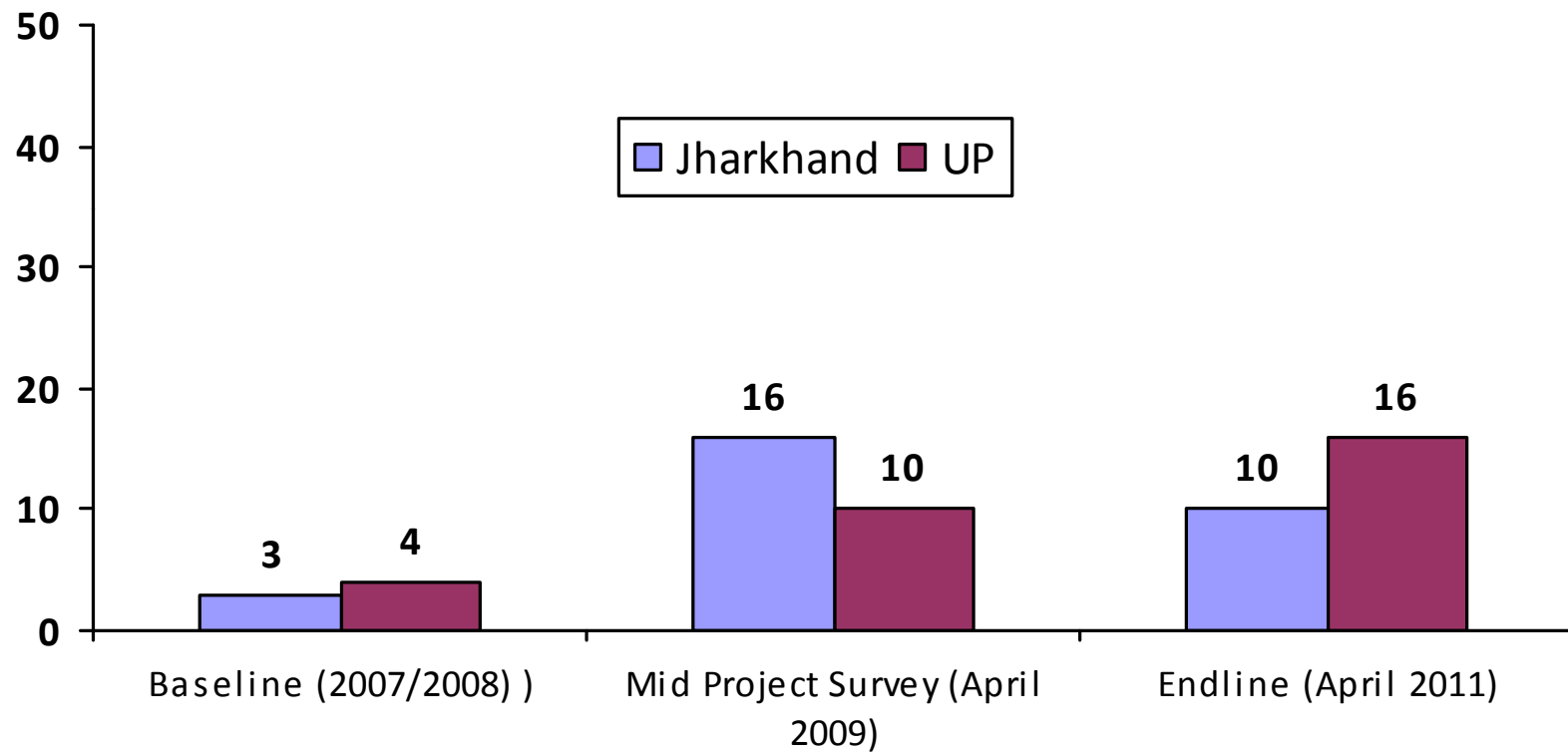
Maternal Anemia IFA Received and Consumed

Jharkhand

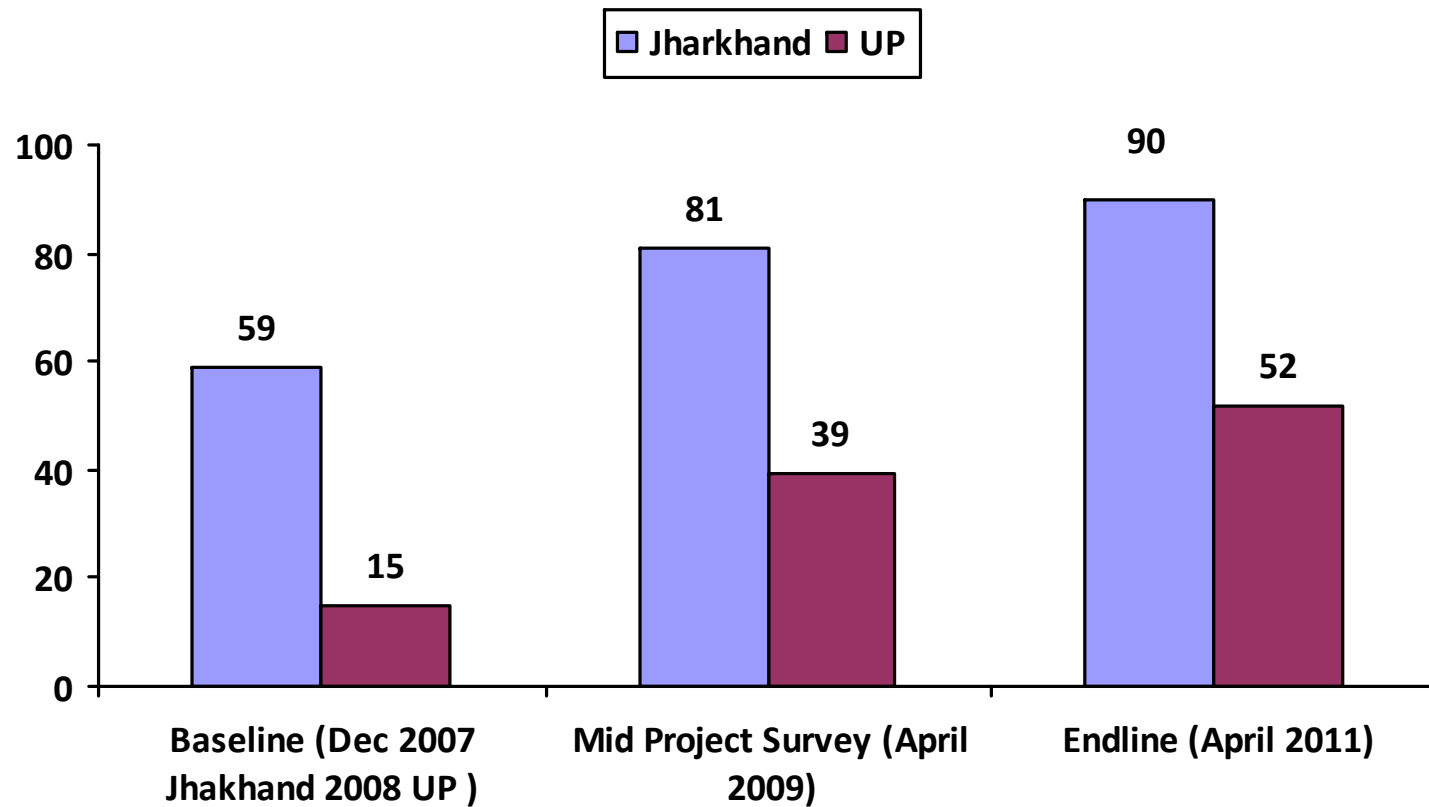
UP



Deworming Medicine Received

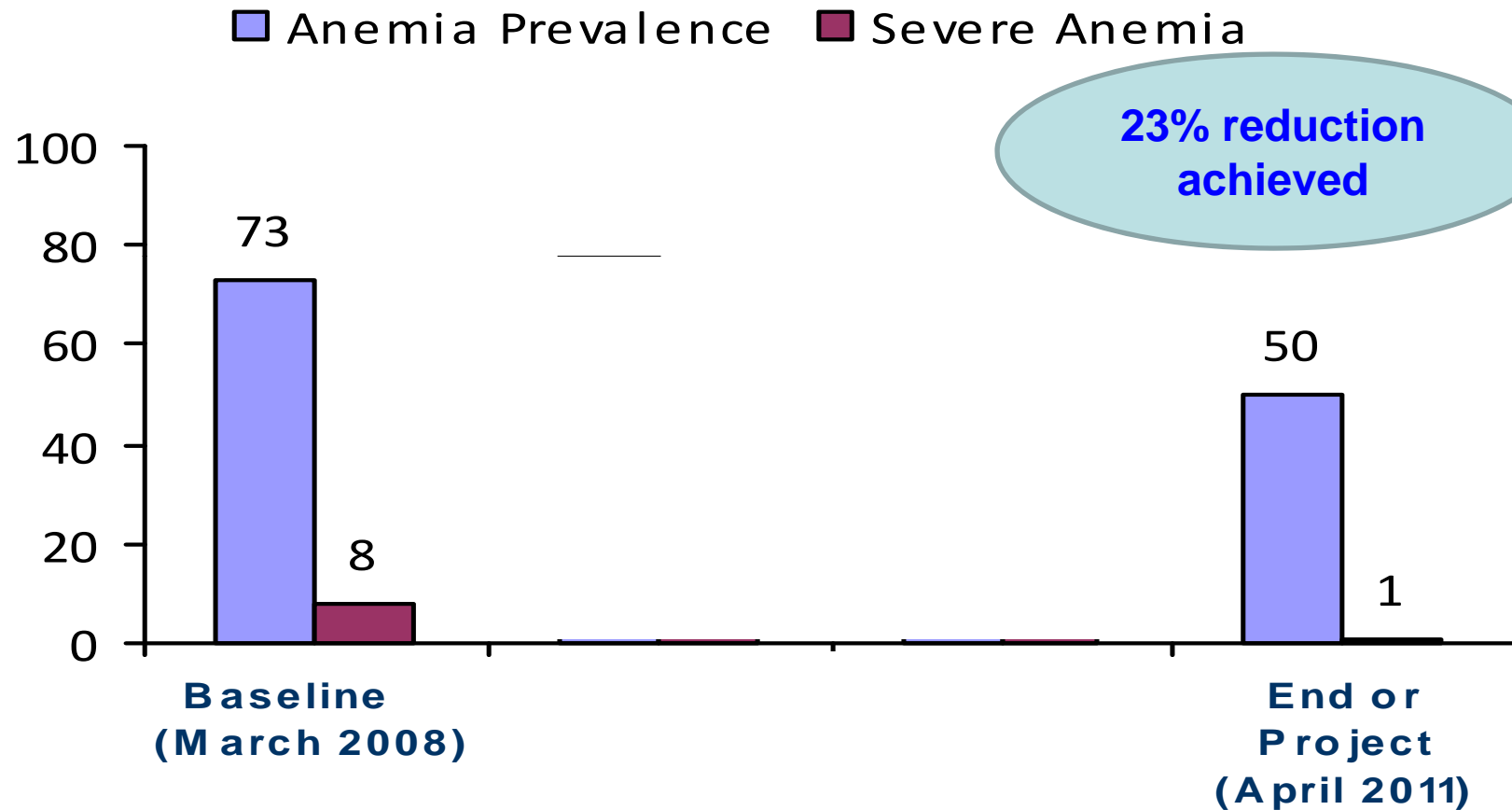


Maternal Anemia ICDS Food Received



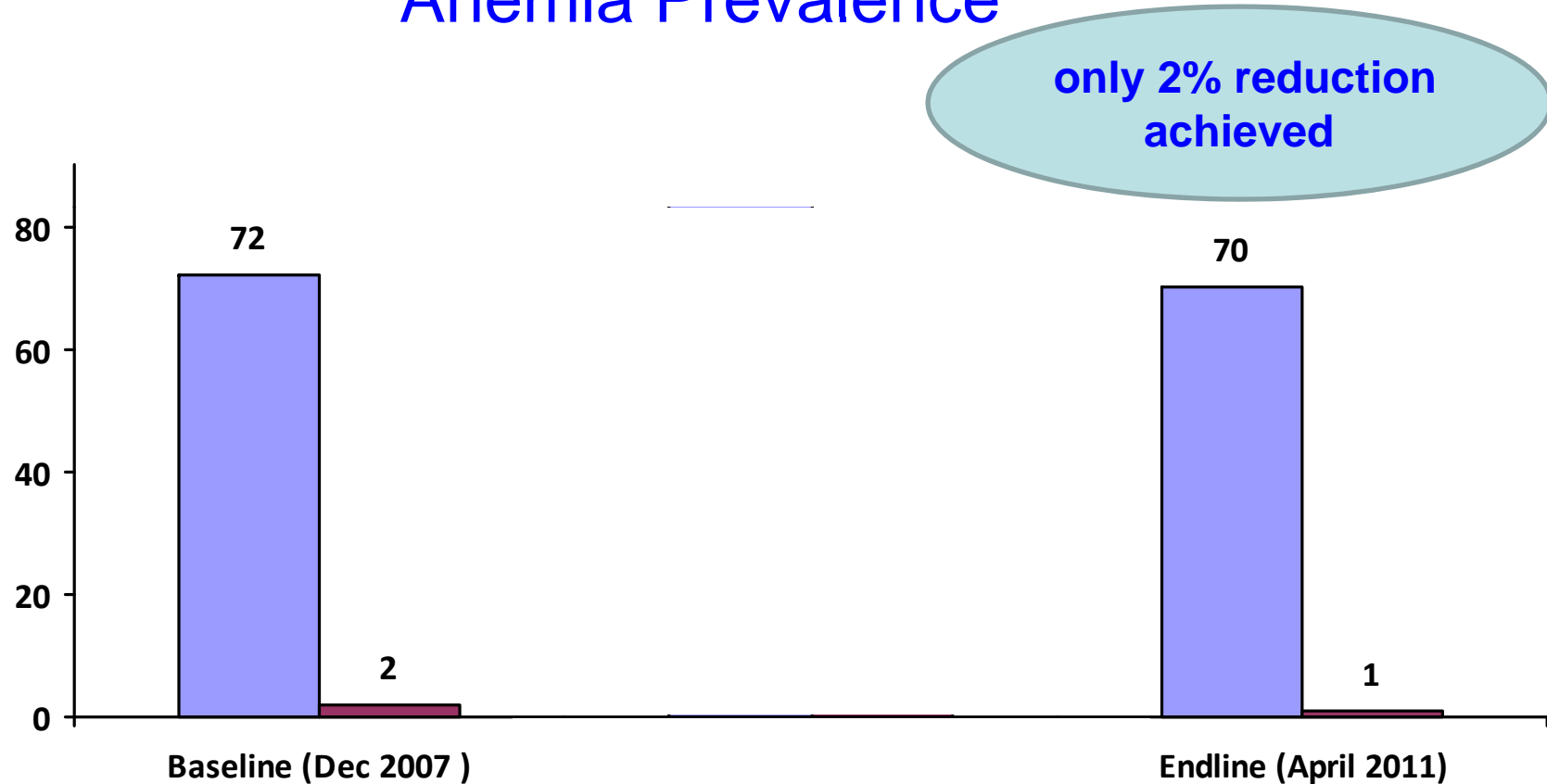
Results for Impact on Anemia Prevalence

Maternal Anemia Prevalence UP



Mean Hb Improved from 9.8 to 10.9 g/dL

Maternal Anemia Jharkhand Anemia Prevalence



Mean Hb Improved from 10.14 to 10.34 g/dL

What Worked

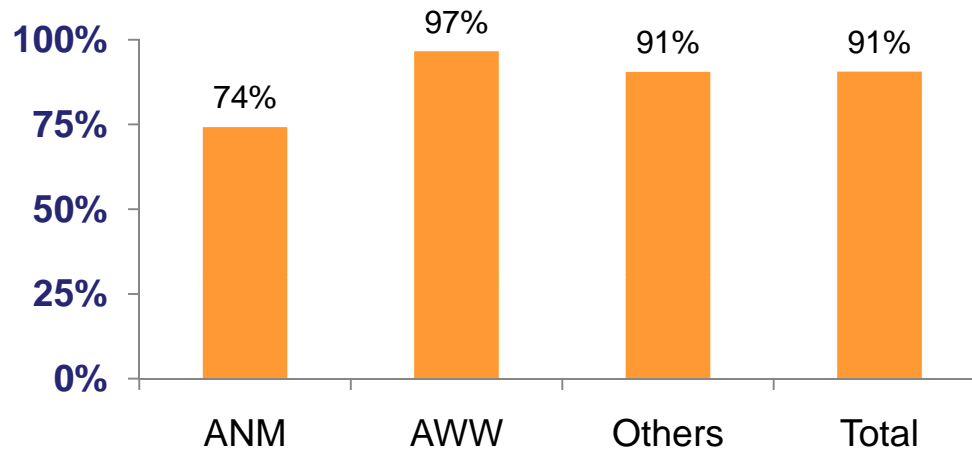
- **Helping ANM to assist (Job Aid)** how to find out unregistered pregnant woman for antenatal care, how to locate them, counseling steps for pregnant woman for anemia control and simple check list to avoid stock out at sub-center level.
- **Empowering Medical officers** through (Self guide, a tool) that provided simple steps to estimate expected number of pregnant mothers and compare them with actual registration and find out the registration gap
- **Hand Holding and mentoring** frontline workers
- **Creating Demand?** through print media, electronic media and folk media improved utilization... to get data that it made an impact is difficult proposition within the framework and mandate of our work..

Challenges in Anemia Control

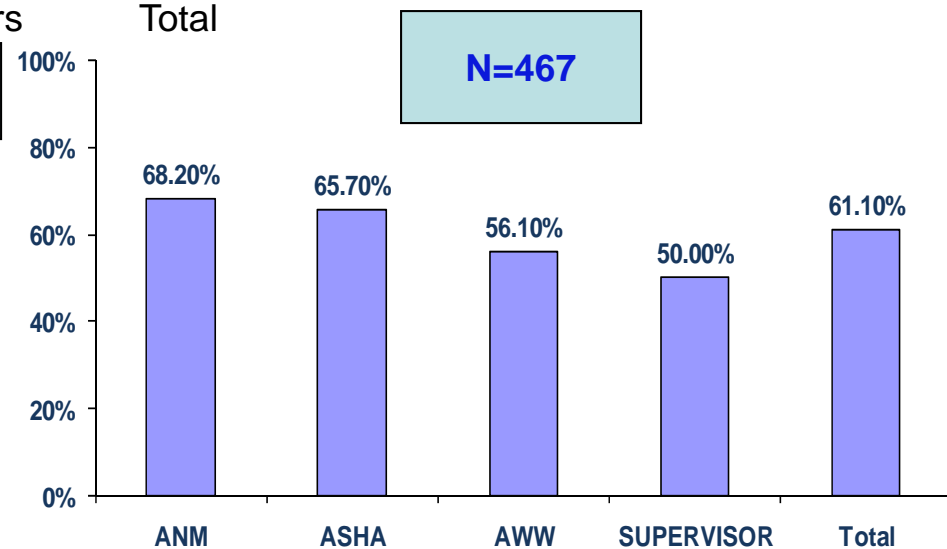
- Not a priority disease for **health care provider**, nor for **beneficiaries**. It is a SILENT MORBIDITY
- 100 IFA tablets are recommended for **prevention** of anemia and is enough for additional requirement of iron for pregnancy for fetus, placenta and increased blood volume.
- Compliance for this 100 IFA also is a challenge.
 - Relative lack of importance for anemia as perception hardly exists..(provider and clients both)
 - Time availability by health workers for anemia (provider)
 - Priority for counseling vs other assignments (provider)
 - Capacity, conviction, understanding and desire to counsel
- Fortification of food, accepted world over needs to be strengthened, which is a proven technology.

Challenges converted to Innovation

Jharkhand UP Health workers were anemic themselves...?



N=126



N=467

Challenges beyond us..

- Political instability
 - Government Changes
 - Frequent Transfers of CMO/MO
 - Maoist and Terrorist activities
- Changes of Leaders and staff
 - Country Program Director and project director changed
 - State Coordinator changed three times in both the state
 - Country Director Changed
 - AOTR at India and Washington change

Will Anemia Control be achieved ever?



Jharkhand State

Reproductive Child Health | Initiative | RCH Schemes | RCH Camp

OUR GOAL OF PROVIDING HEALTH CARE TO
"THE LAST HOUSEHOLD & THE LAST PERSON
IN THE STATE

A Little Care For
Future



**What ever you do
may look to be
insignificant, but is
very important
that you do it.**

**The smallest drop
of rain create the
ocean**

We salute



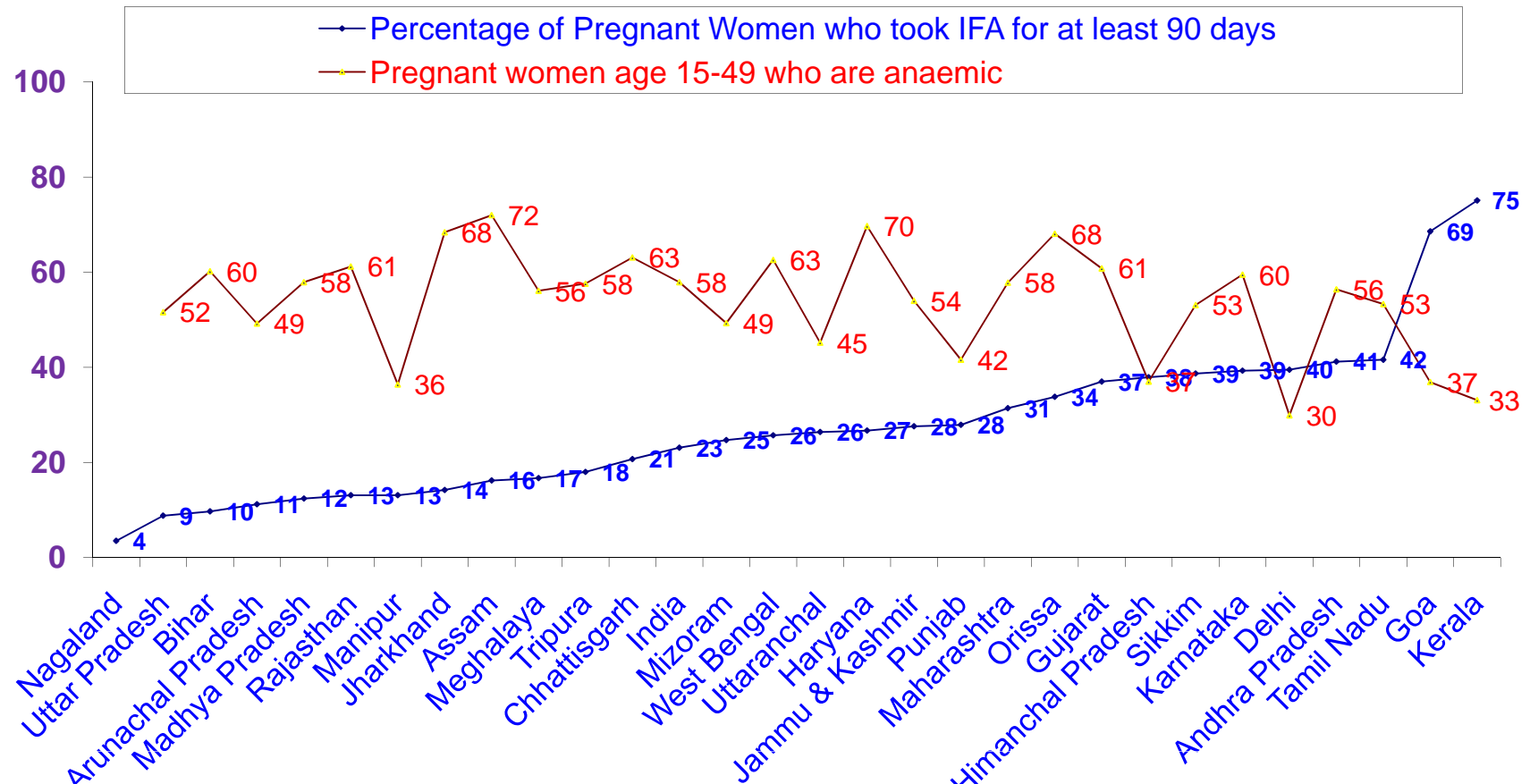
Knowing is not enough;
We must apply....
Willingness is not enough;
We must do.....

Johann Wolfgang von Goethe;
German Writer 1749-1832



A2Z—the USAID Micronutrient and Child Blindness Project—is managed by the Academy for Educational Development (AED) and funded by the United States Agency for International Development (USAID), Health, Infectious Disease and Nutrition (HIDN) Office of the Bureau of Global Health, Cooperative Agreement, Leadership with Associate Awards, GHS-A-00-05-00012-00. The information provided does not represent the views or positions of the U.S. Agency for International Development or the U.S. Government.

INDIA NFHS III: Anemia Vs IFAS



Source: NFHS III (2005-06)