

Weekly Iron & Folic Acid Supplement Program for Adolescents

**State Institute of Health & Family Welfare,
Jaipur**

Anemia

Condition - Number of red blood cells in the blood is low. (Normal value for female hb- 12-15 gm/dl)

- **Iron deficiency** -Adolescent are at highest risk of anemia during their growth spurt as-
 - Not getting enough folic acid or vitamin B12
 - Losing lot of blood
 - Certain diseases or inherited blood disorders

Normal amount of red blood cells



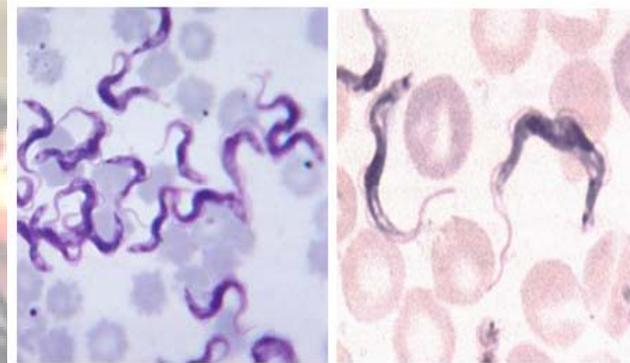
Anemic amount of red blood cells



Reasons For Anemia

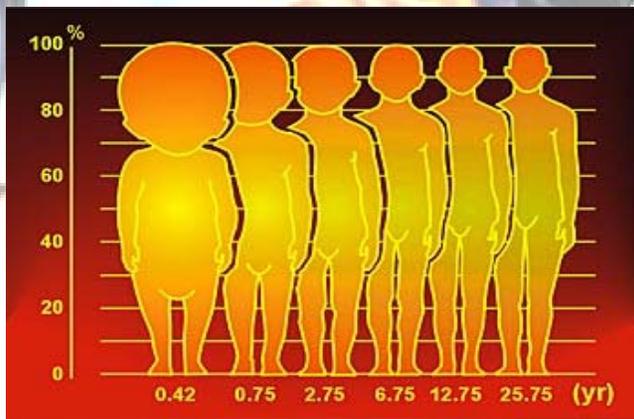


Poor dietary intake of Iron



Human Parasites - Responsible for a number of serious diseases in people.

Worm infestation and high rate of infection

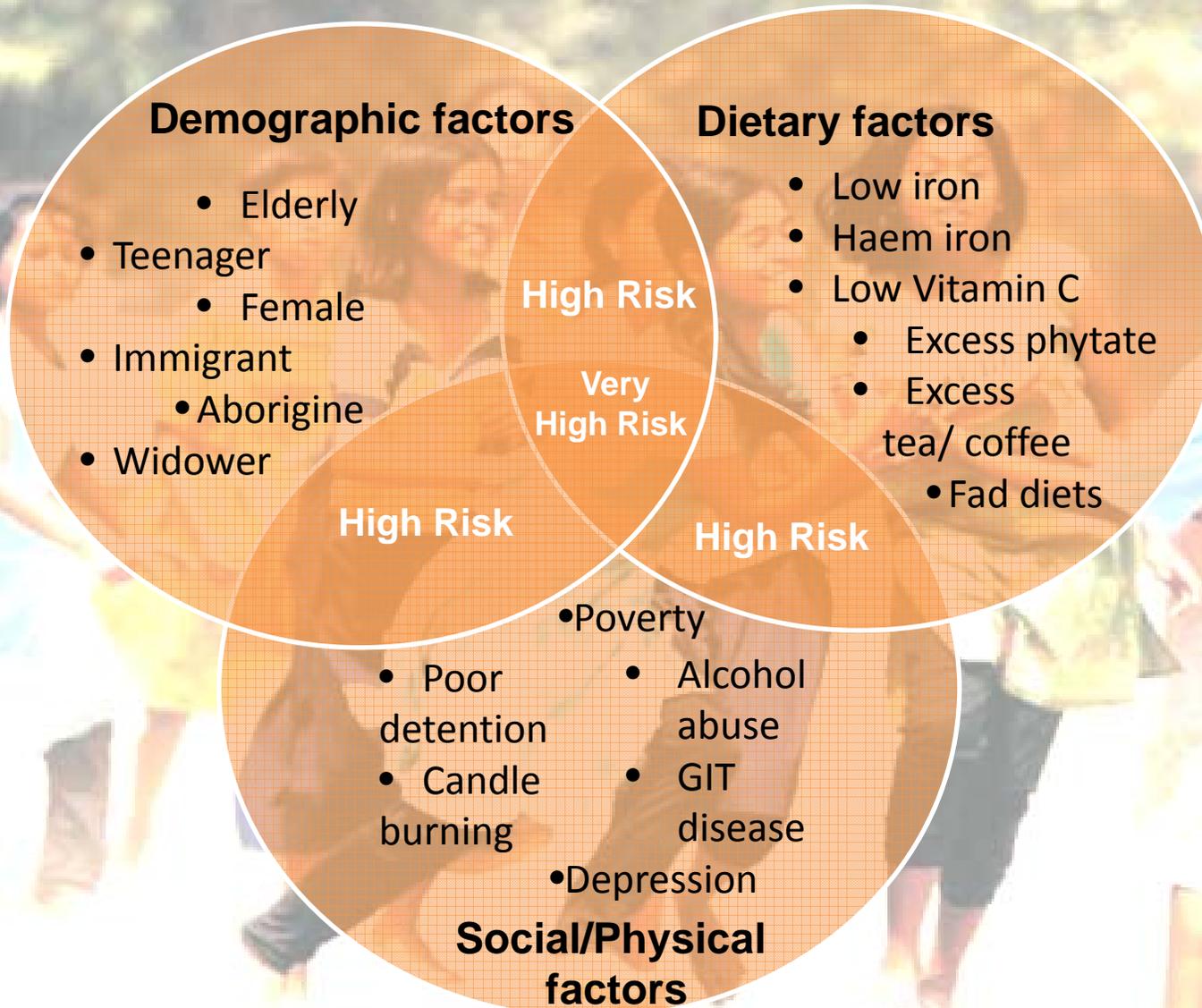


Growth spurt leading to increased demand of Iron in the body



Onset of menstruation (in girls)

Other Causes of Anemia



High Risk Groups for Anemia



Pregnant Women



Lactating Women



Adolescents

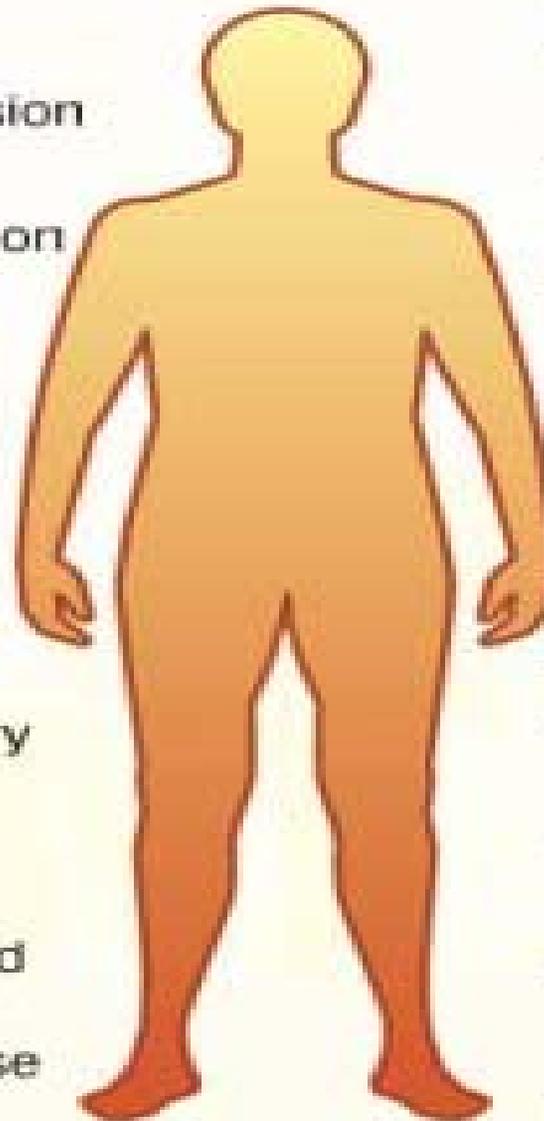


People with poor dietary

Symptoms of Anemia



- Lethargy
- Fatigue
- Malaise/depression
- Angina
- Impaired cognition
- Impaired immune system
- Anorexia
- Intolerance to cold
- Endocrine/metabolic abnormalities
- Cardiorespiratory disturbances
- Gastrointestinal disturbances
- Tendency toward bleeding
- Reduced exercise tolerance



- Weakness
- Shortness of breath
- Exertional chest pain
- Impaired concentration
- Impaired libido/impotence
- Insomnia
- Headache
- Pallor
- Neuromuscular disturbances
- Cutaneous disturbances
- Musculoskeletal symptoms
- Pruritus

Implications of Anemia

- Diminished work capacity & physical performance
- Impaired physical growth, poor cognitive development in adolescents
- Anemic adolescent girls have higher risk of pre term delivery & babies with low birth weight

Iron deficiency anaemia and
Women's Health



Facts–World

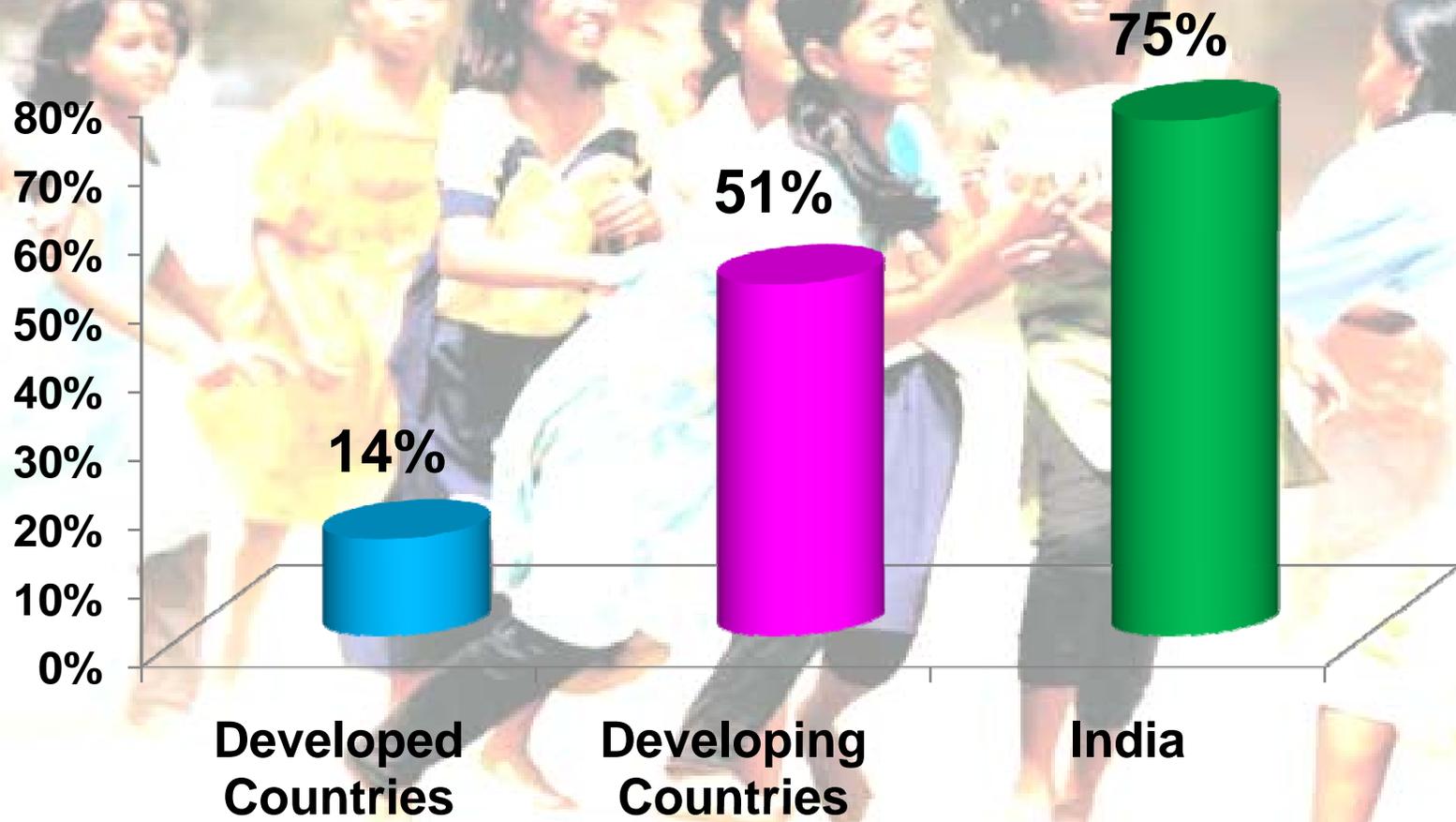


- 4-5 billion People i.e. 66-80% of world's population are anaemic
- In developing countries every second pregnant woman & about 40% of preschool children are anemic.
- Global prevalence of anemia is estimated 30.2% in non pregnant women rising to 47.4% during pregnancy.
- Contributes 20% of all maternal deaths.

Source-WHO



Anemia Prevalence in Pregnant Women



Source-WHO

SIHFW: an ISO 9001: 2008 certified institution



Facts-India

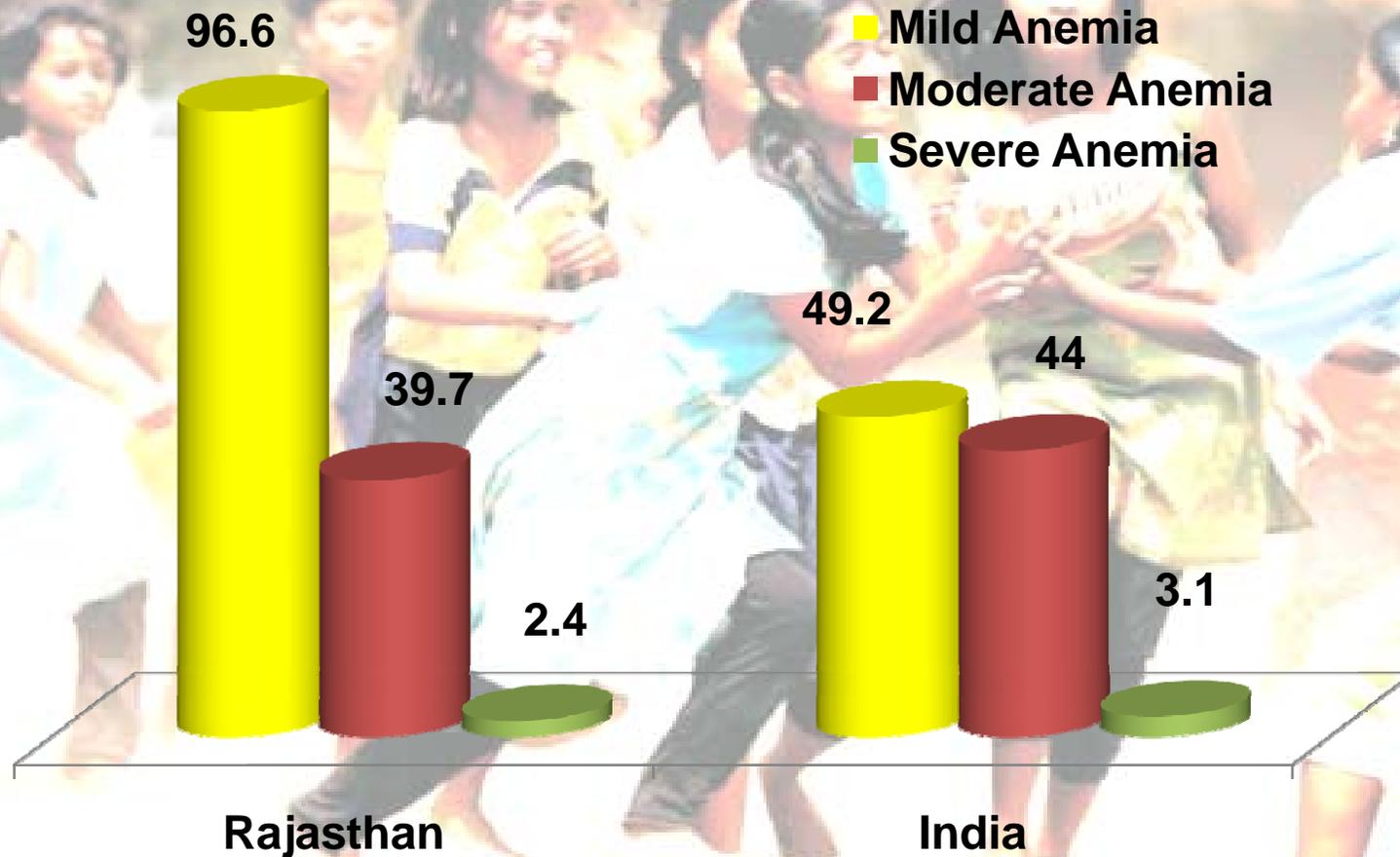
- Iron Deficiency Anemia (IDA) is the more prevalent in India
- The prevalence of anaemia (Hb value of <12 g% in girls and Hb value of < 13g% in boys) is high amongst adolescents.

(As per the report of NFHS-III and the National Nutrition Monitoring Bureau Survey.)

- Out of 5.7 crores adolescents girls 3.2 crores are anemic & 2 crores boys out of 6.5 crores are anemic. (Source- Census 2011 projected population)

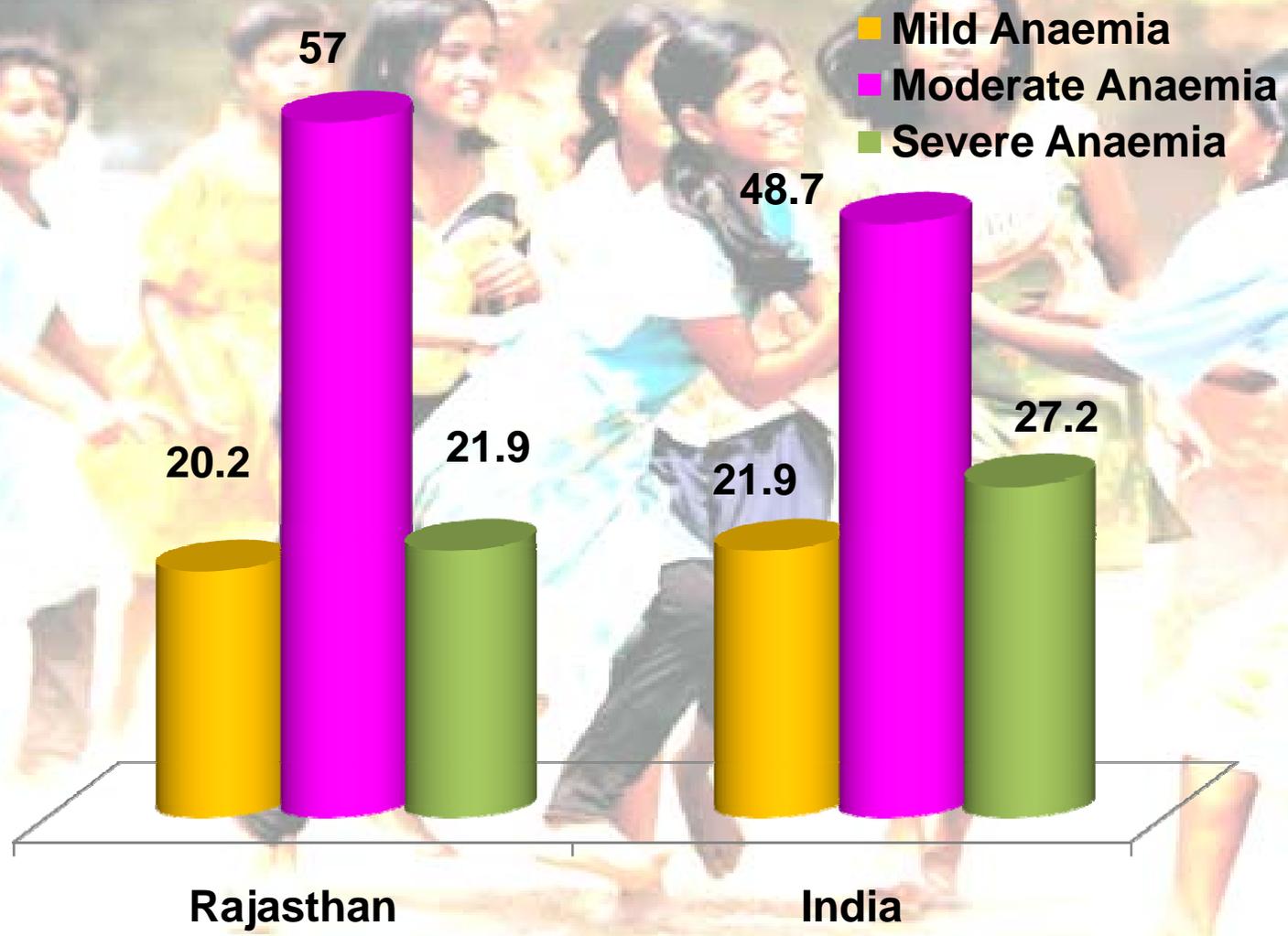
Source- Press Information Bureau, Gol,17 july,2012 &

Anemia among Children (%)



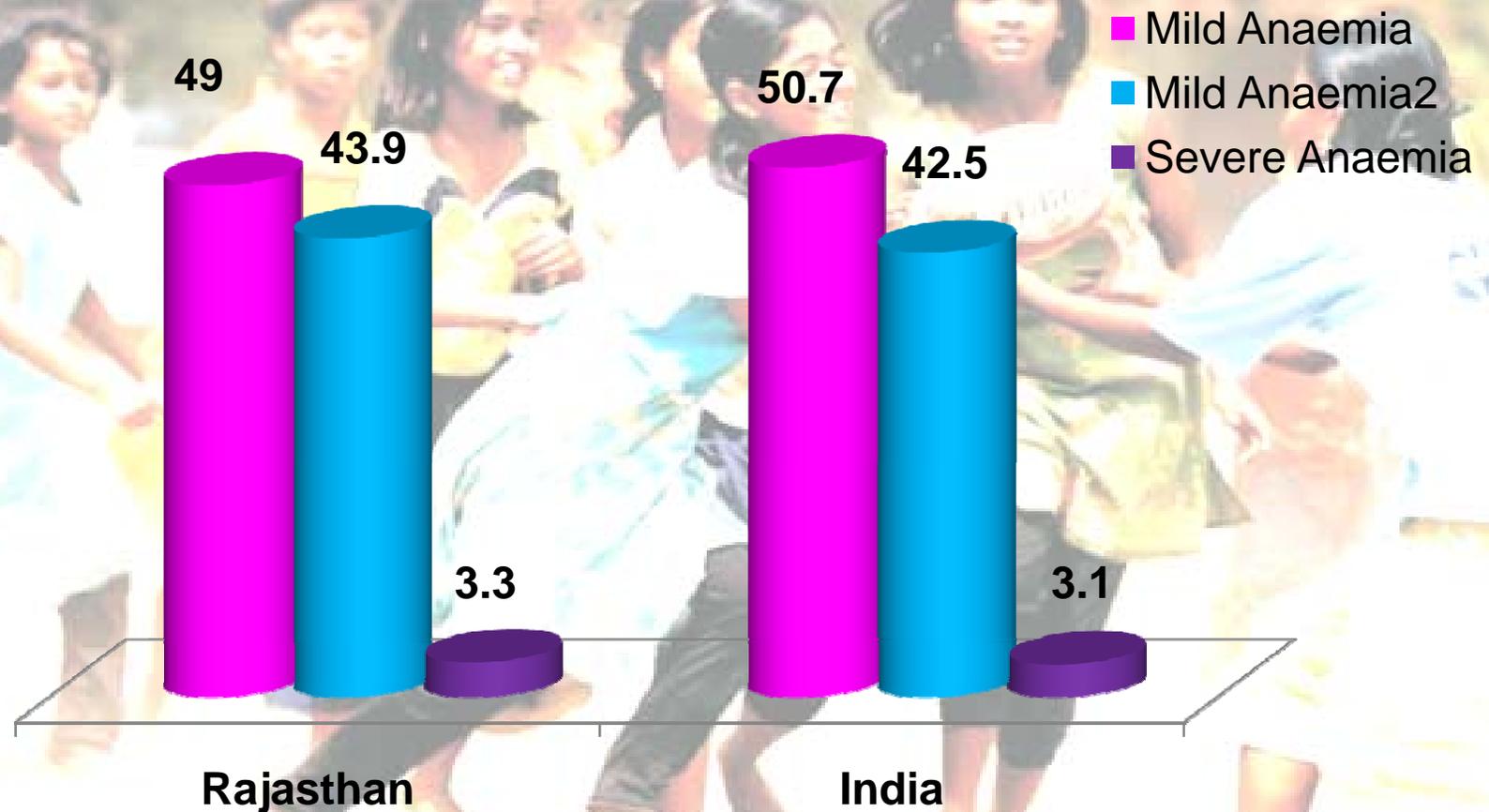


Anemia among Adolescent Girl (%)



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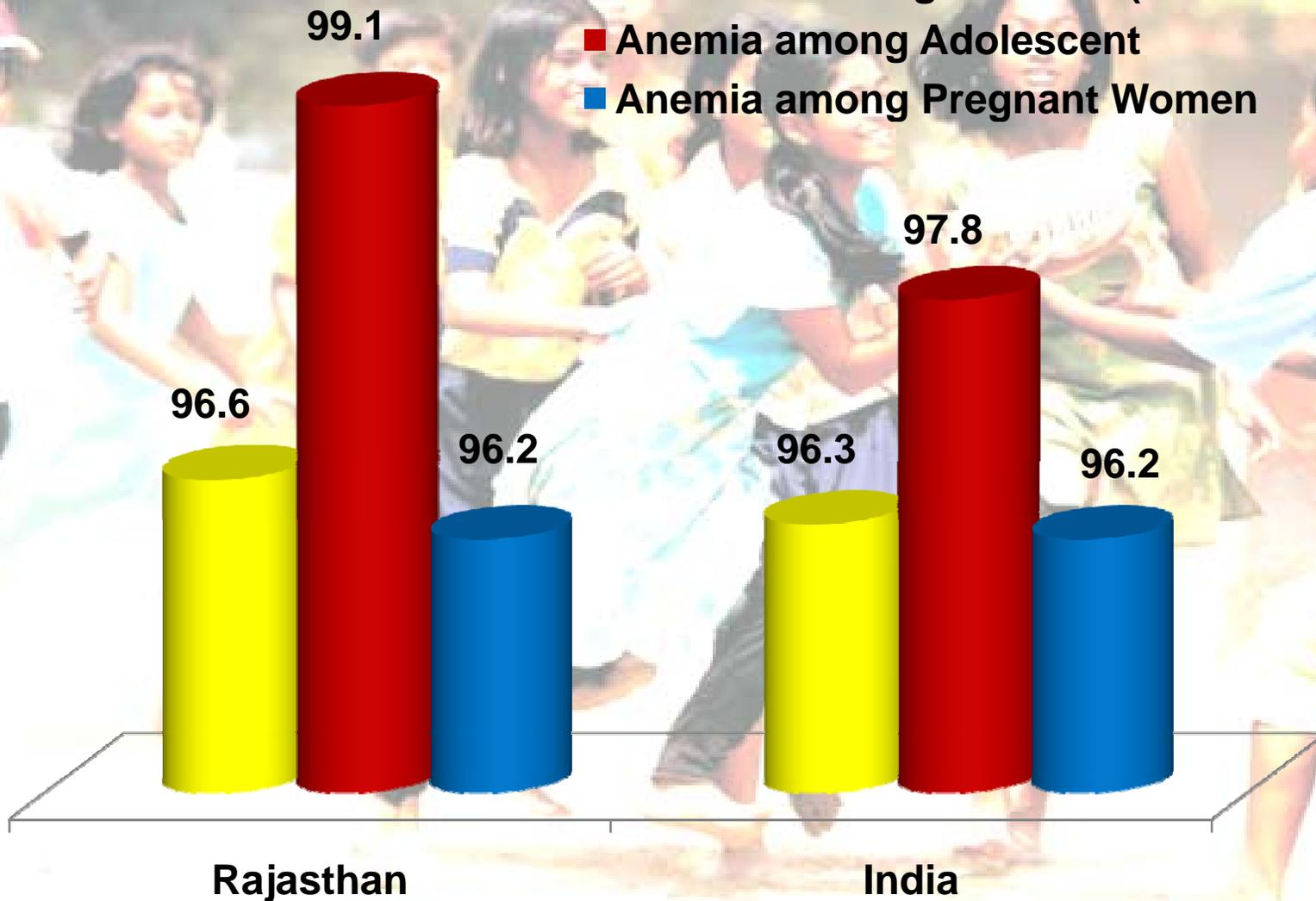
Anemia among Pregnant Women (%)



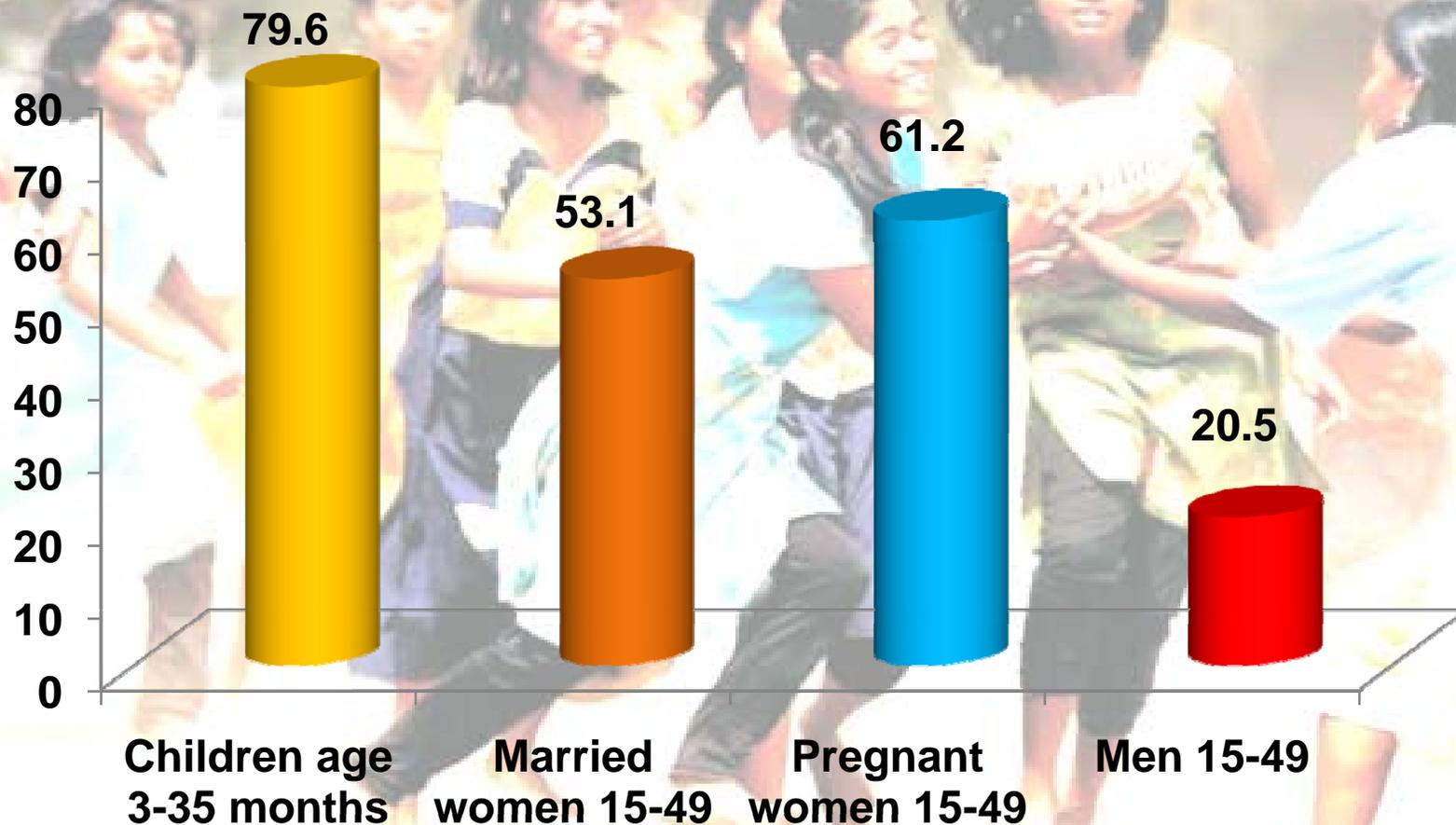
Source-DLHS 2,RCH

Anemia Status (%)

- Anaemia Among Children (0-71 Month)
- Anemia among Adolescent
- Anemia among Pregnant Women



Prevalence of Anemia in Rajasthan(%)





Need of the Program

- WHO estimates globally up to 500 million women of reproductive age suffer from anemia
- Women and children are most vulnerable due to greater iron requirements
- Severe maternal anemia increases risk of :
 - Maternal and neonatal mortality and morbidity
 - Fetal growth
 - Premature birth and iron deficiency in infants



Weekly Iron Folic Acid Supplements–Programme (WIFS)

- Approach ensuring adequate iron status of women, particularly before and during first three month of pregnancy
- Implemented in countries with **high levels of iron deficiency** and anemia
- Women from **low income groups** who may not have access to processed iron-fortified food products considered a priority group
- Reducing the prevalence of anemia among women of reproductive age

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health

WIFS Program in India



- Govt decided to implement the WIFS Programme for **Adolescents** from the **financial year 2013-14**.
- Evidence based programmatic response to the prevailing anemia situation
- Based on the weekly supplementation of WIFS.
- Provided **free of cost** Iron and Folic Acid deworming tablet, along with testing and counselling
- Cover approx. 13 Crore beneficiaries

Source- Press Information Bureau, Govt, 17 July, 2012

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Why focus of Adolescents?



Early Marriage



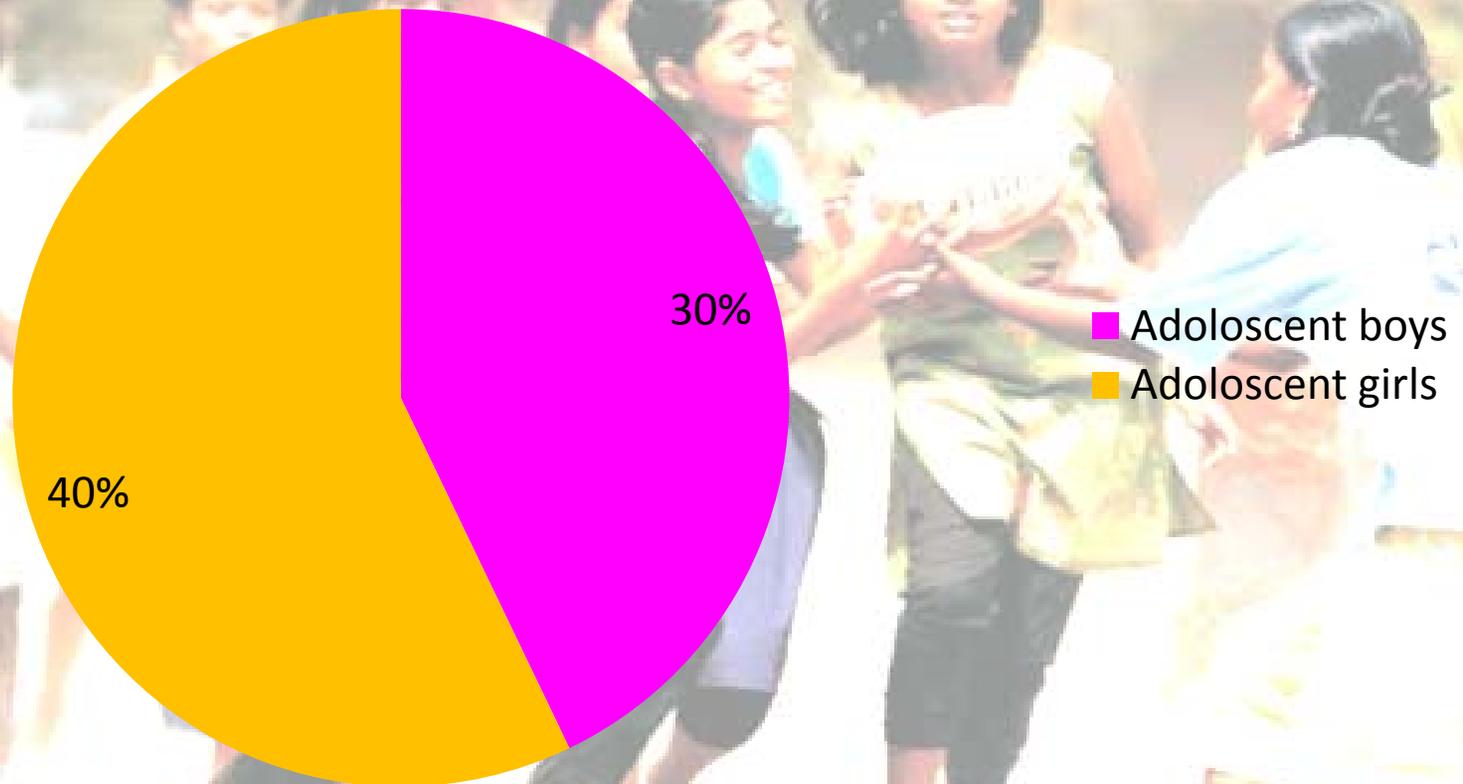
Early Pregnancy



Under Nutrition

- **58% of women are married before 18 years**
- **16% of women are pregnant in age group 15-19. (NFHS-3)**

Status of Anemia in Adolescents-India



41% of all maternal deaths in the age group 15-24 yrs

(Source-SRS-2004-06)



Goal of the Program

- **Long term goal** - Break the inter-generational cycle of anemia
- **Short term goal** - Nutritionally improved human capital

Source: Operational framework: WIFS for adolescents



Objective

To reduce the prevalence and severity of nutritional anemia in adolescent population (10-19 years)

Source: Operational framework: WIFS for adolescents



Target Group



Implemented in both rural and urban areas & focus on-

- **School Based (Boys & Girls)**

- School going adolescent girls and boys in government/gov.aided/municipal schools from 6th to 12th class (10-19Years)

- **Community based through Anganwadi Center (Girls Only)**

- Adolescent girls who out of school/Married /pregnant and lactating adolescent girls



WIFS Strategy

- Administration of WIFS
- Screening of target groups for moderate/severe anemia & referring these cases to health facility
- Biannual Albendazole (400 mg) for de-worming
- Information & counseling

Benefits – WIFS

- WIFS may be a more efficient preventive approach because:-
 - Fewer side effects
 - Easier to manage at the community level
 - More sustainable
- Daily dosing of iron & folic acid reduce the risk for
 - Neural tube defects (NTDs)
 - Neonatal mortality
 - Enhance maternal & infant health
- Weekly vs daily supplementation with 60 mg of iron had similar impact, except in severity

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health



Conditions for Providing WIFS

- Prevalence of anemia is $>20\%$ among women of reproductive age
- Anemia prevalence is $>40\%$ in pregnant women or children under five years of age
- In absence of any anemia prevalence data, dietary patterns and socioeconomic status

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health

Dosage of IFA Supplementation

Population Group	Dose of Iron & FA	Weekly vs Daily
All women of reproductive age	60 mg iron; 2800 µg FA	Weekly
Women during pregnancy & 3 months postpartum	60 mg iron; 400 µg FA	Daily
Women where mandatory FA fortification has been introduced & shown to be effective already	60 mg iron (only Iron supplementation necessary)	Weekly
Antifolate antimalarial treatment users (usually used in malaria endemic areas)	60 mg iron (only Iron supplementation necessary)	Weekly

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health

Guideline on Consumption of WIFS Tablets



- Take WIFS with the main meal of the day
- If complain of side effects take after dinner
- Increase intake of food rich in vitamin C
- Drinking of tea & coffee within an hour of consuming meal will be discouraged.
- Motivated to correct hygiene practices

Source: Operational framework: WIFS for adolescents

Strategies for Prevention



- Administration of free WIFS of 100mg elemental iron and 500µg Folic acid to target population.
- Screening of target groups for moderate/severe anaemia and referring.
- Biannual de-worming (Albendazole 400mg), six months apart, for control of Helminthes infestation.
- Information & counselling
 - Improving dietary intake
 - Prevention of intestinal worm infestation.
- Fixed day strategy under which preferably **Monday** to be declared as “**Anaemia Control day**” or “**WIFS day**”

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health

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Management of the Program

- MOHFW and State Health departments implement the program through the school & ICDS system.
- Convergence between the Health, Education & WCD to ensure joint accountability for successful implementation of the program.

Source: Operational framework: WIFS for adolescents

Management Structure



•MOHFW/State Directorates of H&FW

- Issue guidelines & provide technical support for implementation
- Supply & logistic of IFA & Albendazole & Monitoring & review

•District Health HQ office/CMO Office

- Overall in- charge
- Supply IFA & Albendazole
- Training & Monitoring & review

Goal-School Going Adolescents
(boys & girls) 6-12 standard
(by Edu.Dept.)

Goal-Out of school adolescents
(girls)
(by ICDS Dept.)

Objectives-

- Distribution of IFA & Albendazole tablets
- Providing dietary counseling
- Counseling for preventing worm infection & adoption of correct hygiene practices

Activities for Implementation of WIFS – by ICDS & School



- Estimation of IFA & De-worming Tablets
- Enroll & screen adolescent girls for presence of anemia
- Maintaining supply & stock
- Training & Capacity Building
- Distribute IFA – Monday fixed day
- Biannual de-worming in February and August-
- Monitoring & Review
- IEC

Source: Operational framework: WIFS for adolescents

Estimation of Supply



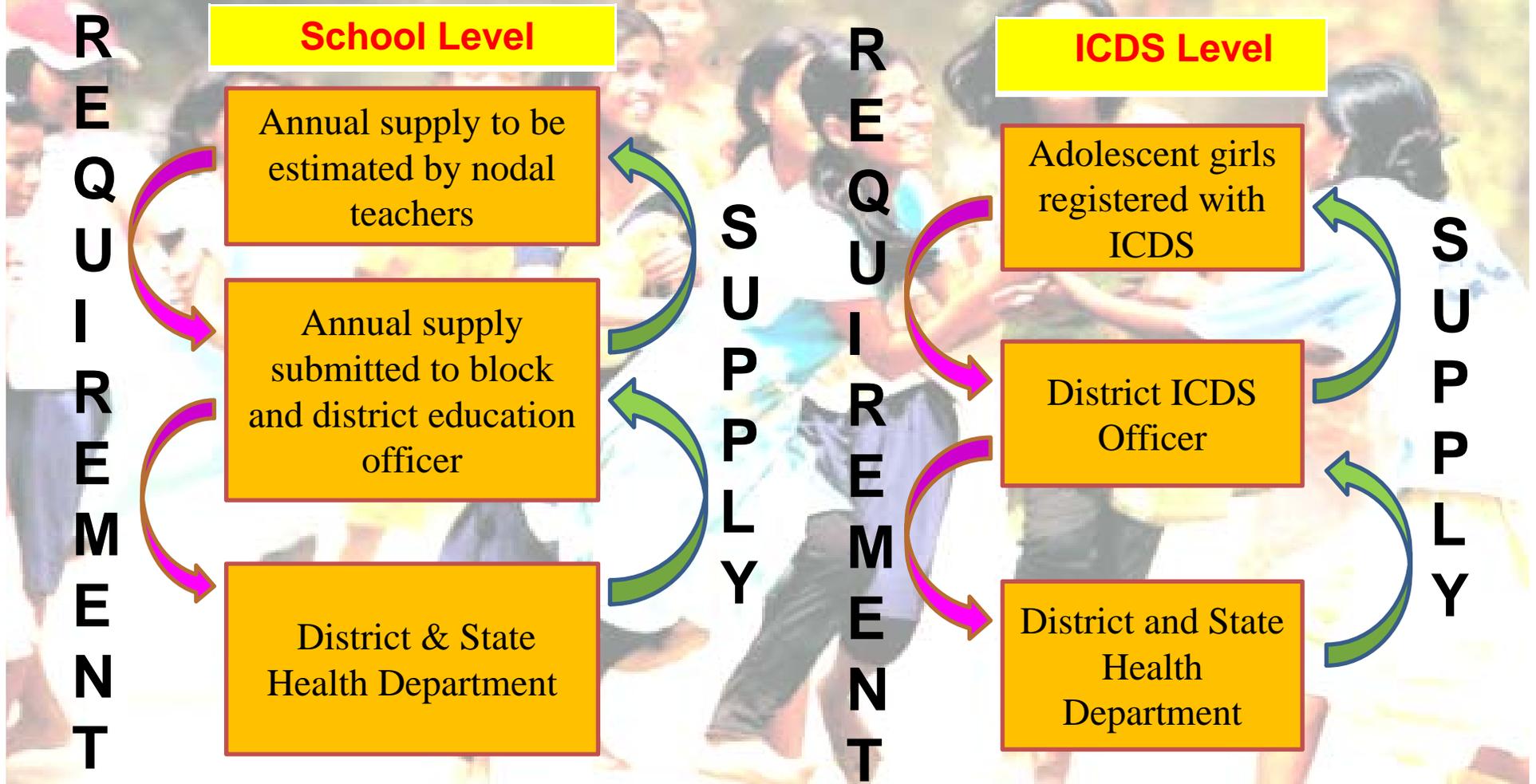
School based Program

- **IFA tablets for the year**
= number of children in 6-12th standards + total teachers x 52
- 20 % stock as buffer
- **De-worming dose Requirement per year** = number of children in 6th-12th standards x 2 +10% as buffer stock.

Out-of School Program

- **IFA tablet Supply:** No. of adolescent girls registered with ICDS x 52 tablets + 52 tablets/ year for each AWW AWH for ASHA.
- An additional 20% will be added for ensuring adequate stock supply.
- **De-worming tablet supply-** No. of adolescent girls registered with ICDS x 2 tablets of Albendazole + 10% as buffer stock

Supply & Procurement



Source: Operational framework: WIFS for adolescents

Monitoring of School Based System

Monitoring process completed by four levels-

- **Individual**
 - Individual compliance card (ICC) or self monitoring card
- **Class**
 - Monitoring register
- **School**
 - Nodal teacher would consolidate information & submit to principal
- **Block level-**
 - Block education officer will review & consolidate the reports.

Source: Operational framework: WIFS for adolescents



- **District level**-DEO submit the block level report

Role of State/District WIFS Advisory Committee-

- Monitor the status of the implementation
- Training
- Supply & distribution
- Provision & usage of IEC material
- Facilitate Convergence



Source: Operational framework: WIFS for adolescents

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Format 3 - Monthly School Report			
State:		District:	
		Village/Town:	
Name of School:		Classes in school:	
Reporting month and year:			
Total No. of 6-12 th class students:		Girls :	Boys:
Total number of Nodal teachers:			
a) Opening stock of IFA:			
b) Date of Supply IFA:			
c) Quantity of IFA received :			
d) Opening stock of Albendazole:			
e) Date of Supply Albendazole:			
f) Quantity of Albendazole received:			
g) Batch Number of IFA:		Date of expiry of IFA:	
Adolescent population covered in reporting month		Girls	Boys
			Total
h) Given 4 IFA tablets per month (5 in case of 5 weeks in a month)			
i) Number of non-compliant students (<i>consumed less than 4 tablets per week</i>)			
j) Students with moderate/severe anaemia referred			
k) Total IFA tablets consumed by students			
l) Total number tablets consumed by the nodal teachers:			
m) Balance IFA tablets			
<i>If February/August month for de-worming</i>			
n) Girls given Albendazole			
o) Boys given Albendazole			
p) Grand Total of boys and girls given Albendazole:			
q) Number of Nutrition Health education sessions conducted in the reporting month by noda teacher			
r) Total Albendazole consumed in month:		Balance Albendazole tablets:	
Remarks if compliance rate less than 70%:			
Remarks on side-effects:			
Nodal Teacher 1		Nodal Teacher 2	
		Head Master	

Monthly School Reporting Format

Monitoring of ICDS System

- **Adolescent Girl**
 - Self monitoring & ICC
- **AWWs-**
 - Maintenance of Kishori card/ ICC & supply register
- **Sector level-**
 - Supervisor submit the information to CDPO
- **Block level-**
 - Block official monitoring the program & compile data
- **District level-**
 - District official monitoring the program & compile data



Role of State/District WIFS Advisory Committee-

- Monitor the status of the implementation
- Training
- Supply & distribution
- Provision & usage of IEC material
- Facilitate Convergence

Source: Operational framework: WIFS for adolescents

SIHFW: an ISO 9001: 2008 certified institution

Format 4 - Monthly Block Report for ICDS /Education Dept			
State:		District:	Block:
Reporting month and year:		Total No. schools 6-12 th class/ ICDS projects:	
Target population for the month		Girls:	Boys: Nodal Teachers: Total:
a)	Opening balance of IFA:		
b)	Date of supply of IFA:		
c)	Quantity of IFA received:		
d)	Opening balance of Albendazole:		
e)	Date of supply Albendazole:		
f)	Quantity of Albendazole received :		
g)	Batch Number of IFA tablets:	Date of expiry of IFA:	
Adolescent population covered in reporting month		In school (for Block Education Officer)	Out of school (for CDPO officer)
g)	Girls given 4 IFA tablets per month (5 in case of 5 weeks in a month)		
h)	Boys Given 4 IFA tablets per month (5 in case of 5 weeks in a month)		
j)	Grand Total of boys and girls given IFA tablets:		
k)	Total number of nodal teachers given IFA tablets:		
l)	Total adolescents with moderate/severe anaemia referred		
		Planned	Conducted
m)	Number of Nutrition Health Education session conducted in reporting month by nodal teachers (for Block education officer)		
n) IFA tablets stock		Consumed: Balance:	
If February/August month for de-worming		In school (for Block Education Officer)	Out of school (for CDPO officer)
o)	Girls given Albendazole		
p)	Boys given Albendazole		
q)	IFA tablets stock	Consumed: Balance:	
r)	Grand Total of boys and girls given Albendazole:		
Remarks:			
CDPO/ Block Education Officer			

Block Level format for ICDS/School

Format 5 - District Monthly Report			
State:		District: High Focus (Y/N)	
Reporting month and year:		Total No. of govt. schools 6-12 th class: Total ICDS projects:	
Target population for the month		Girls:	Boys: Nodal Teachers: Total:
a)	Opening stock of IFA:		
b)	Date of supply IFA:		
c)	Quantity of IFA received :		
d)	Opening stock of Albendazole:		
e)	Date of supply Albendazole:		
f)	Quantity of Albendazole received:		
g)	Batch Number of IFA:	Date of expiry of IFA:	
Adolescent population covered in the district in the reporting month		In school	Out of school Total
h)	Girls given 4 IFA tablets per month (5 in case of 5 weeks in a month)		
i)	Boys Given 4 IFA tablets per month (5 in case of 5 weeks in a month)		
j)	Grand Total of boys and girls given IFA tablets		
k)	Total number of nodal teachers given IFA tablets:		
l)	Total adolescents with moderate/severe anaemia referred		
m)	Total number of ANM in district		
		Planned	Conducted
n)	Total school visits by ANMs in reporting month		
o)	Total number of VHNDs conducted by ANM with session on Adolescent Anaemia in the reporting month		
p)	Total Nutrition Health Education session conducted by nodal teacher in reporting month		
q)	IFA tablets stock	Consumed: Balance:	
If February/August month for de-worming		In school	Out of school Total
r)	Girls given Albendazole		
s)	Boys given Albendazole		
t)	Grand Total of boys and girls given Albendazole		
u)	IFA tablets stock	Consumed: Balance:	
Remarks			
District Health Officer		District Programme Officer (ICDS)	District Education Officer

District Level format for ICDS/School



ANNEXURE 9

Format 9 - State Monthly Report			
State:		No. of District:	No. of High Focus Districts:
No. of districts with WIFS programme:		No. of High focus district with WIFS programme:	
Reporting month and year:		Total No. govt. schools 6-12 th class:	Total ICDS projects:
Target population for the month		Girls:	Boys: Total:
a)	Date of procurement of IFA:		
b)	Quantity of IFA procured:		
c)	Date of procurement of Albendazole:		
d)	Quantity of Albendazole procured:		
e)	Date of expiry of IFA		
Adolescent population covered in the state in the reporting month		In school (DoE)	Out of school (ICDS) Total
f)	Girls given 4 tablets per month 4 IFA tablets per month (5 tablets in case of five weeks in a month)		
g)	Boys Given 4 tablets per month 4 IFA tablets per month (5 tablets in case of five weeks in a month)		
h)	Grand Total of boys and girls given WIFS tablets		
i)	Total adolescents given with moderate/severe anaemia) referred		
j)	IFA consumption by Nodal Teacher / AWW (please fill in appropriate column DoE for r)		
		In school	Out of school Total
k)	Girls given Albendazole		
l)	Boys given Albendazole		
m)	Grand Total of boys and girls given Albendazole		
Achievement in IFA distribution against target = Total Girls and boys given IFA tablets (i) / Total Target population *100=			
<p>.....</p> <p>Director RCH</p> <p>State Health and Family Welfare Department</p>			

State Level format for ICDS/School

Format 6 -ANM Monthly Report							
Name of ANM:		Village:	PHC:	Month/Year:			
Block:		District:	Total No. of govt. Schools under ANM (6-12 th class):				
Total No. of villages under ANM:		Total visits planned for reporting month:					
	Name of schools	Date of visit	Total student 6-12th class	Students given 4 WIFS tablets (5 tablets in case of five weeks in a month)	Total number of nodal teachers	Nodal Teachers given 4 WIFS tablets (5 tablets in case of five weeks in a month)	Signature of Head master
1			Girls:				
			Boys:				
			Girls:				
2			Boys:				
			Girls:				
3			Boys:				
			Girls:				
4			Boys:				
			Girls:				
5			Boys:				
			Girls:				
6			Boys:				
			Girls:				
7			Boys :				
	Total visit Planned		VHNDs session on anaemia planned:				
	Total visit conducted		VHNDs session on anaemia conducted:				
			<ul style="list-style-type: none"> Dates - Name of villages where session conducted Average Number of girls Attended the session 				

ANM PHC level for Schools and ICDS



Format 8 MO-PHC monthly report

Name of MO In-charge:		Name of PHC:		Month/Year:	
Block:		District:			
Total No. Of villages under PHC:			Total No. of ANM under PHC		
	Name of ANM	School visit Planned in reporting month	School visit conducted in reporting month	VHNDs with session on anaemia planned in reporting month	VHNDs with session on anaemia conducted in reporting month
1					
2					
3					
4					
5					
6					
7					
	Total No. of ANM	Total School visit Planned	Total School visit conducted	Total VHNDs with anaemia session planned	Total VHNDs with anaemia session conducted
TOTAL					
<hr/> Medical Officer In-charge PHC					

MO PHC level for Schools and ICDS

Capacity Building & Training



Training will be provided to different stakeholders at State/District /Block level:-

At State Level	District Health Officer, District Education Officer, District Program Officer ICDS (DPO) & TOT
In School WIFS Program	
At District Level	Block Education Officer, Block Extension Educator, Block Health Officer/Block Medical Officer
At Block Level	Nodal Teachers for WIFS (Preferably Science Teacher)
Out- of- School WIFS Program	
At District Level	CDPO, Block Medical Officer, Supervisor
At Block Level	AWW,ASHA,ANM



Training of Trainers

- **National**

- Training at NIHFW
- Training of State level trainers
- Participants from 6 States

(Delhi, Rajasthan, Punjab, U.K. Haryana & M.P)

- Health, Education & ICDS



Proposed Training–Rajasthan

- **State**

- Training at SIHFW
- Training of District level trainers
- 6 participants from each districts
- Health, Education & ICDS

- **District**

- Training at district

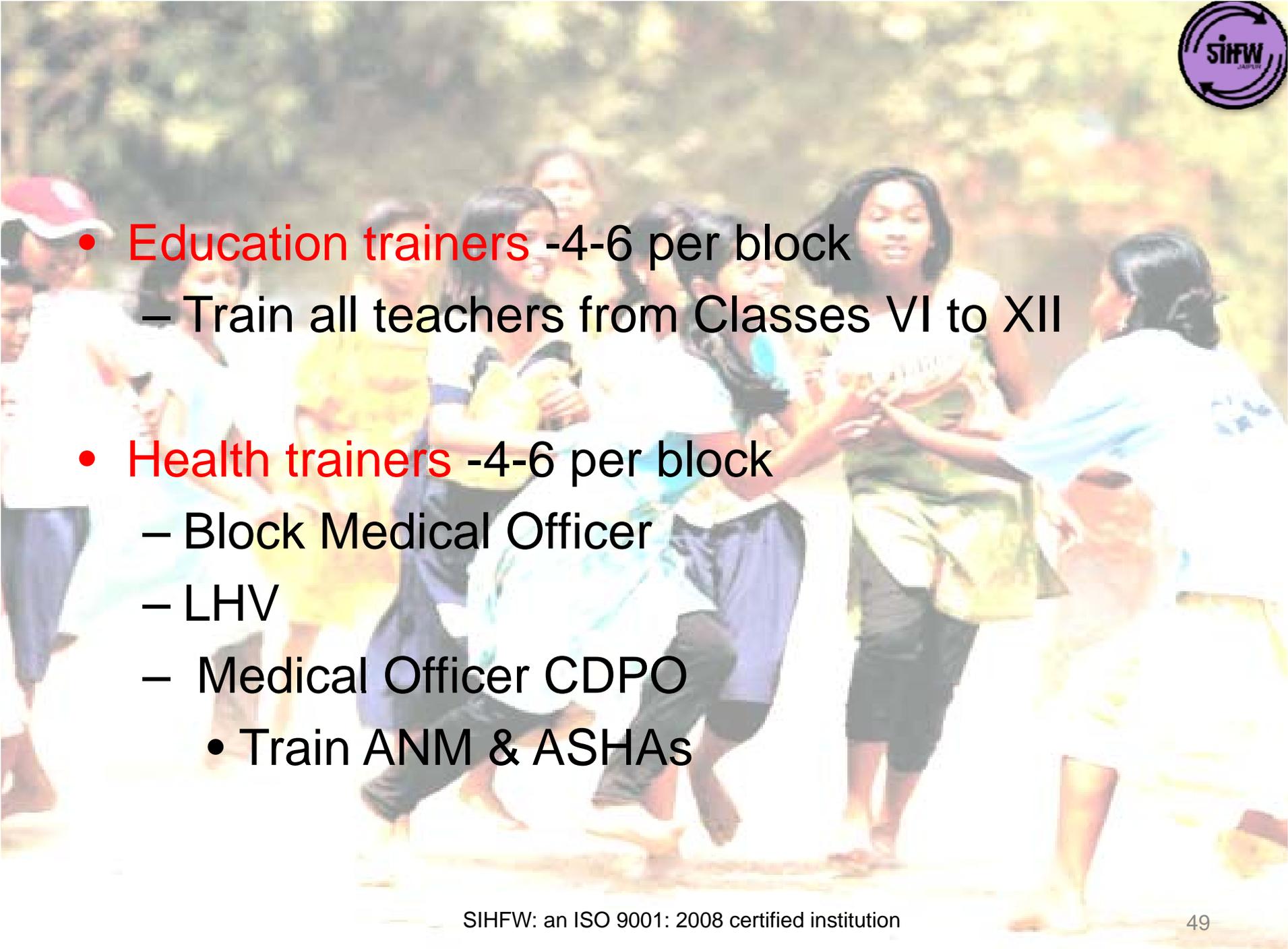
- Training of block level trainers

- **ICDS trainers** - 4 – 6 trainers per block

- CDPO

- Lady Supervisors

- Train 100 – 150 AWCs

- 
- The background of the slide is a photograph showing a group of women, likely health workers or community members, in a rural or semi-rural setting. They are dressed in traditional Indian attire, including sarees and blouses. Some are holding small objects, possibly health-related items, and appear to be engaged in a community activity or training session. The scene is outdoors with trees in the background.
- **Education trainers** -4-6 per block
 - Train all teachers from Classes VI to XII
 - **Health trainers** -4-6 per block
 - Block Medical Officer
 - LHV
 - Medical Officer CDPO
 - Train ANM & ASHAs



Challenges

- Adequate funding
- Community level support & PPP including NGOs.
- Uninterrupted supply of good quality iron & folic acid supplements
- Effective communication strategies with the media and other
- Reaching out-of-school girls

Source-Issue-WIFS in women of reproductive age: Its role in promoting optimal maternal & child health

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Thank You

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www.sihfwrajasthan.com

or

contact : Director-SIHFW on

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