



"Anganwadi Shiksha" e-Learning training to empower front-line nutrition workers in Madhya Pradesh, India

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Nutrition in a Digital World

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Implemented by



Malnutrition in Madhya Pradesh

Population: **ca. 80 million**

Children (under 5 years): **ca. 11 million**

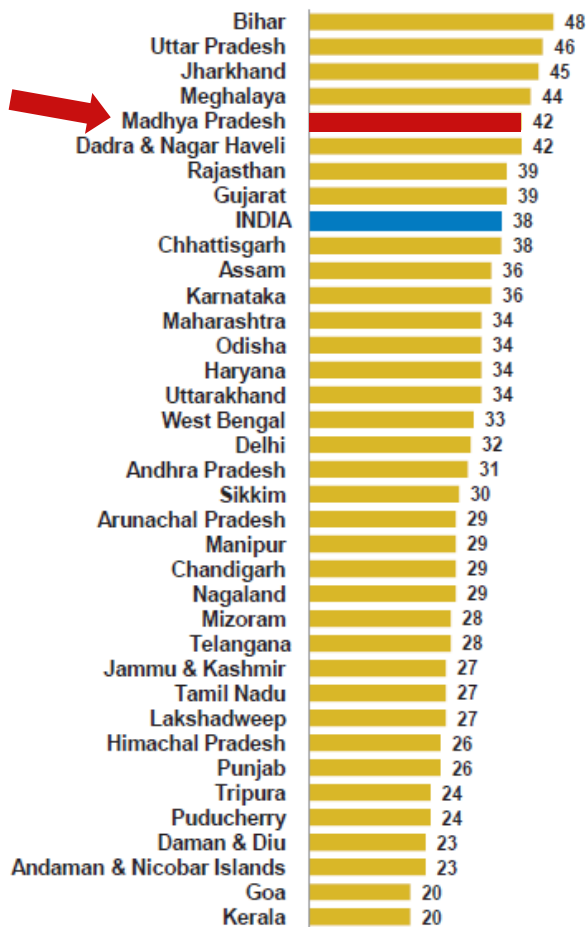
Proportion of rural population: **ca. 72 %**

Prevalences in rural areas

- Women and men (BMI < 18.5 kg/m²): **31.8 %** (NFHS-4)
- Anaemia in women (15-49 years): **53.7 %** (NFHS-4)
- Wasting (under 5 years): **20.8 %** (CNNS)
- Stunting (under 5 years): **40.6 %** (CNNS)

MoHFW/UNICEF 2019; IIPS 2017, GoI 2015; GoI 2011

Stunting in Children (0-59 months)
by State/UT (in %, NFHS-4)



Challenges of Anganwadi Workers

Anganwadis (AWW) are social workers, employed by *Department of Women and Child Development* (government staff)

- Knowledge gaps on adequate nutrition
- Variation in education level but high native intelligence
- Lack of access to further training (in remote locations)
- 7 modules, each 160 pages of content = cognitive overload



Why e-Learning tool?

- AWWs are responsible for the health/nutrition of women and children at local health centers. However, lack access to structured and standardized training possibilities.
- To fill in this gap, the GIZ FaNS project, together with the department in Madhya Pradesh, developed an interactive eLearning training platform, called **Anganwadi Shiksha**, to help systematically build AWW capacity.

Features of the e-Learning training platform



Open source



40 hours of e-Learning



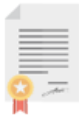
Real life local scenarios



Gamification of e-learning -Videos, games and quizzes
(4,259 sketches and 807 animation sequences)



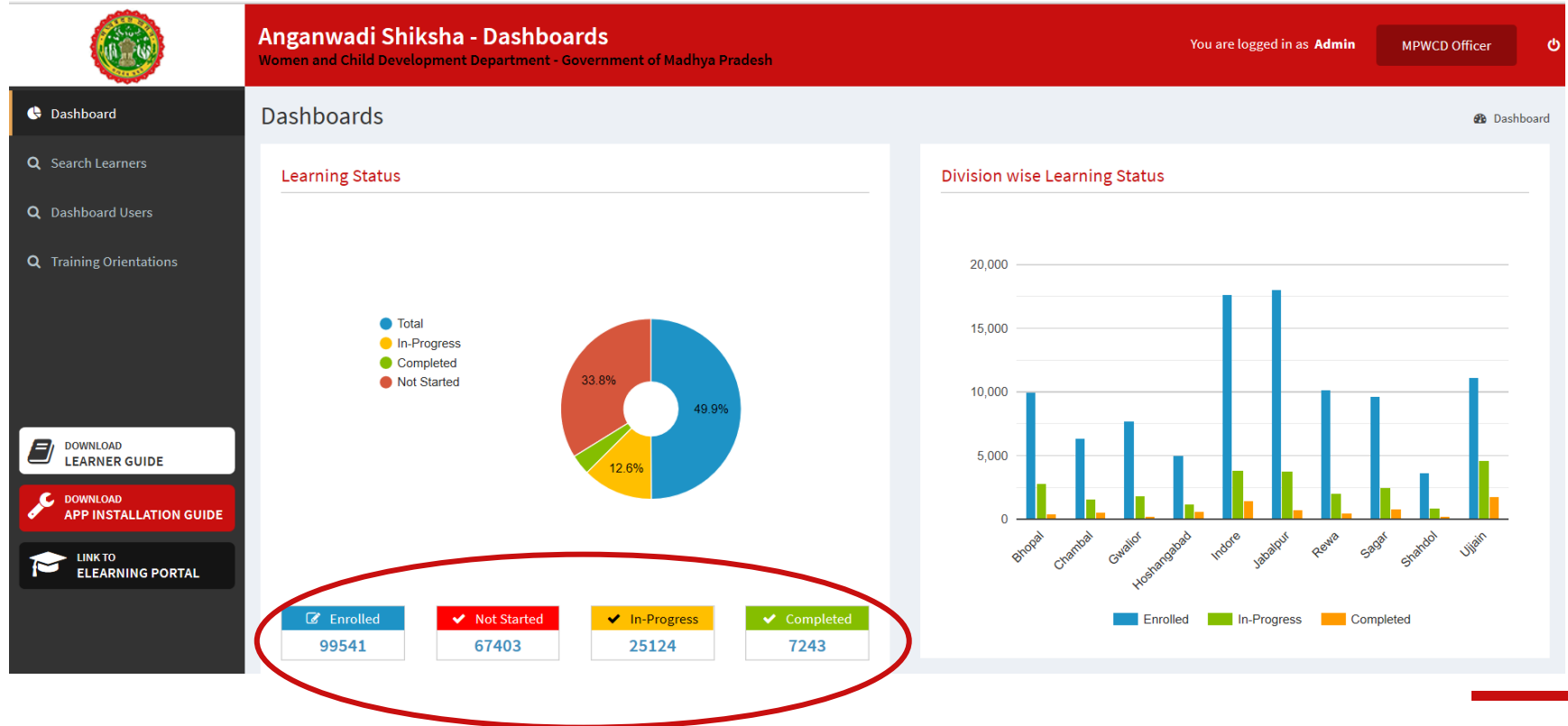
200 randomised assessment questions



Certificates are provided on successful completion



Dashboard in e-learning platform



Aim of the Effectiveness Study:

- **To assess the effects of the e-learning digital tool on the capacity-building of front-line workers**
- **To assess if there is any need for modification of content, design and user-friendliness of the e-learning platform**
- **To understand the implementation challenges and ways to overcome in the next phase of sustainability and roll-out**



Methodology of the Study

Mixed method study used to collect data.

- **Quantitative Questionnaires:**
n=105 intervention, n=100 control, with themes to capture information.
- **In-depth Interviews:**
with 9 supervisors and 2 district-level officials (n=11) to understand perceptions and challenges.
- **Focus Group Discussions:**
n=6, comprising 6-8 AWWs each, to gain in-depth insights into their perceptions, problems.



Key Findings: 1. Knowledge Enhancement

- Completion of the course led to better awareness of roles and responsibilities as compared to control group

Table 2. LEVEL OF AWARENESS OF ROLES AND RESPONSIBILITIES

Variables	Group	Mean \pm std. dev. (SD)	t	Sig (p value)
Providing health & nutrition education for women and children	Intervention	3.5 SD 0.60	0.266	0.221
	Control	3.5 SD 0.67		
Counselling on breastfeeding	Intervention	3.9 SD 0.35	1.017	0.034
	Control	3.80 SD 0.44		
Home visits	Intervention	3.77 SD 0.44	0.484	0.312
	Control	3.74 SD 0.48		
Encouraging community participation	Intervention	3.67 SD 0.49	1.012	0.022
	Control	3.60 SD 0.58		

2. Content, language and Visuals

- e-learning modules are comprehensive, systematic, local scenario based and in accordance with roles and responsibilities of Anganwadi workers.
- Assessment at the end of each module acted as reinforcement to appraise performance and learning.
- 92% said the content was easily understood and 99 % the language was comprehensible.
- 61% said they acquired more knowledge and skills than in other training programs.
- 64% said the information provided on the platform went into greater detail than classroom training.



3. User friendliness

- Overall can be **easily maneuvered** through contents.
- E-learning is limited in its use by **illiterate workers**- unable to maneuver smart phones.
- Familiarity with **feedback mechanism and live dashboard** is limited with AWWs and Supervisors.
- 65% said it took them less effort to learn using the eLearning platform.



4. Issues with Implementation

- **Communication gap** – Ambiguous information was provided to workers that platform will be inaccessible after certain time period
- **Internet connectivity**- poor network connectivity did hamper spirit of AWWs, limited information that offline version is available
- Limited technical assistance during the **one-day orientation** and the instructional insufficiencies experienced by supervisors
- **Handholding support/ strategic orientation/provision of user-friendly manual** on MIS login, feedback mechanism, technology-based support to systematically address the implementation challenges
- Need to create a system of knowledge sharing and to improve grievance redressal mechanism of AWWs and supervisors
- Not everyone had access to smartphones

5. Further study on operational feasibility could be planned after full roll-out

Conclusions and Way Forward

- eLearning course could fill a capacity-building gap and enhance the knowledge and counselling skills of front-line workers.
- The content of the e-Learning training was appreciated by the learners, as it was visual and local-scenario based.
- Still a need to systematically address implementation gaps, especially communication at the last mile.
- Recommendations to include content on 'counselling of men and other members of the family' and admission to nutrition rehabilitation centers (NRC)
- platform provides an opportunity to train front-line workers with a minimum of resource mobilization and to ensure quality training through a medium that front-line workers find interest.

व्यवहार केंद्रित विधियां झ प्रदर्शन करना (Demonstration)



अब हम एक और स्थिति पर नज़र डालते हैं । यहाँ आँगनवाड़ी कार्यकर्ता मृदुला ऊपरी आहार तैयार करने का सही तरीका, प्रदर्शन कर पालकों को सिखाती है ।

us look at another scenario where an Anganwadi worker, demonstrating the preparation of complementary food to the

Upscaling and replication

e-Learning platform

- Can be adjusted to other states in India and countries retaining basic content
- Can be used on any other Learning Management System
- Adapts to complementary learning with other available approaches in India like Incremental Learning Approach (ILA)

Reach in **Madhya Pradesh:**
97,000 Anganwadi Workers and
3,200 Supervisors

Upscaling in **India:**
1.4 million Anganwadi Workers



Thanks for your attention!

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