

## Awareness About Drudgery Reducing Farm Tools and Implements by Women Farm Workers in Guna District

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### Abstract

*The study investigates awareness towards improved farm tools and implements by the women farmers/farm workers in adopted villages of Krishi Vigyan Kendra, Aron, Guna, M.P. Data was gathered from 150 women farmers through a well-structured questionnaire, focused group discussion and personal interview. Findings revealed that women farmers use traditional tools and implements since a long time but most of the women farmers felt immense drudgery in their use. It was also found that most of the farmers were unaware of improved farm tools and implements which reduce drudgery. The results also suggested that the respondents were willing to accept the information and subsequent use the improved tools and implements.*

**Key words:** Awareness; Farm tools; Implements; Drudgery; Farm women

### Introduction

Agriculture is a primary unorganized sector in which women farm workers perform the majority of the drudgery prone work<sup>[1,2,3]</sup>. Women as farmer or farm workers, participate in several activities such as seeding, transplanting, weeding, fertilizer application, plant protection, thinning, harvesting, processing, selling, winnowing, storing, etc. The farm women perform agricultural tasks<sup>[5,6]</sup> with the age old traditional tools since gender friendly appropriate tools are either not available or are insufficient in number or

unawareness. Unsafe, hazardous, unhealthy and long hours of work with age old traditional and cumbersome tools accelerate health related problems, especially among women farmers (Nag and Nag, 2004). Farmers/ farm women are not always aware of the improvements they could make by using scientific and technological knowledge. Thus, the attention of farm women was directed towards the women friendly improved farm tools.

### Material and Methods

Data was gathered from 100 women farmers through a well structured questionnaire, focused group discussion, and personal interview. In the study, various types of primary as well secondary data have been

analyzed. The main objective of the study was to assess the awareness about drudgery reducing tools and implements and preparedness of the community to accept the intervention regarding improved tools.

### Results and Discussion

Profile of respondents: The study depicted (Table 1) that 55 per cent of the respondents were from middle age group (31-40 years), and the age range of the sample farmers were 20-70 years with an average of 39.71 years. The education profiles showed

that 33.3per cent of respondents were illiterate whereas approx 20per cent were having education at matriculate level. The average family size was approx four members per family. Most of the respondents were either farmer (56 %) or agricultural worker (42.7 %).

Farming was major livelihood of sample farmers. 42.7 per cent of farmers were involved in farming for five years with an average of 6.7 years. More than 50 per cent of respondents own their farm with an average land holding of 5.2 bighas (2.08 acres). The study area was diversified in crop cultivation. The major crops grown in the sample area were lentil, cotton, rose, marigold, tobacco, rice, gram, vegetables, wheat, castor, millets. Most of the sample respondents do the farm operations by themselves (98 %) whereas rest of them either hire labors or take help from male family members to perform various agricultural activities. Major farm operation carried out by respondents were tillage and seedbed preparation, sowing, planting, weeding, harvesting, threshing, cleaning, shelling, etc. Awareness and practices about farm tools and implements: Most of the respondents (93.3%) used traditional tools and implements at the farm to perform various intercultural activities. The major tasks carried

out by respondent farm women (Table 2) are tillage and seedbed preparation (68%); Sowing and planting (69.3%); Weeding and intercultural operations (43.3%); Harvesting, threshing, grading (18.7); Cleaning/grading /separation (20.7%); Shelling/ dehulling /peeling (36.0%); livestock management (33.3%). The most of the tedious and drudgery prone activities were done manually by local traditional tools such as hand hoe, sickles, etc. It was depicted from data that although respondents use tools and implements since a long time but still most of the respondents considered that their farms are not mechanized, and they are using traditional tools. The results also showed that 60.0 per cent of respondents faced difficulties & problem in using traditional tools and implements. This result implies that the respondents were least known about improved drudgery reducing tools. It also reflected that there was the wide scope of utilization of improved tools and implements amongst

**Table 1 Respondent profile (N=100)**

Particulars	No.	Percentage
Age group (in year)		
Less than 20	3	3
21-30	22	22
31-40	44	44
41-50	17	17
51-60	8	8
More than 60	2	2
No. of years since farming is done		
Less than 5 year	23	23
5-10 years	59	59
More than 10 years	18	18
Who does the farm operations in the field		
Self	96	96
Family members (especially male)	03	03
Hire labour	01	01
Educational profile		
Illiterate	46	46
Literate but without formal schooling	18	18
Less than primary	04	04
Matriculate	23	23
Intermediate	08	08
Graduate	01	01

Post Graduate	0	0
Major profession		
A farmer	78	78
An agricultural worker	21	21
Other	1	1
Landholding (acre)		
Less than 2 acre	33	33
2-5 acre	64	64
More than 4 acre	03	03
Land ownership		
Yes	88	88
No	12	12

**Table 2 Information and practice about farm activities and tools & implements**

Particulars	No.	Percentage
Which farm operations do you perform at Farm		
Tillage and seedbed preparation	68	68
Sowing and planting	70	70
Weeding and intercultural operations	44	44
Harvesting, threshing, grading	18	18
Cleaning/grading /separation	21	21
Shelling/dehulling/peeling Y	36	36
livestock management	33	33
Do you use any tools/machinery at farm		
Yes	91	91
No	09	09
Do you face any problems in using these tools		
Yes	61	61
No	39	39
What do you consider your major problem		
Availability of tools	21	21
Availability of cash/credit	60	60
Skill	27	27
Availability of information about tools	28	28

sample area. Some of the physical problems cited by respondents in using traditional tools were the pain in joints, waist, forearms, shoulder, knee and feet, back or neck pain, swelling or inflammation, numbness in hands are common among them. Other risk factors were static posture, forceful exertion, repetitive movement, extreme range of motion, awkward posture, etc. Availability of cash/credit (60.7%) was considered as major general problem in using tools / improved tools by respondents whereas availability of

tools (20.7%), skill (26.7%) and availability of information about tools (28.0%) was also cited as major problem associated with the use of tools by respondent women farmers. (Table 2)

Awareness about ergonomically designed drudgery reducing improved farm tools and implements were inquired. Data (Table 3) showed that respondents heard about few drudgery reducing tools such as groundnut stripper, tubular maize sheller. Technologies adoption and access to information: Mode of information sharing and access to information

was discussed with respondents (Table 4). Respondents received information from multiple sources which include fellow farmers, radio, television, extension officers and NGOs. It was found the sample respondents received farm activities related information or advice including improved farm tools and implements from fellow farmers whereas other sources were radio/TV (82%), family members (35.3%), farmers associations (7.3%) and rest from extension officer or newsletters/publications. In focus group discussion it was found that mostly women attend the training programs on agricultural technologies and are the primary recipient of information. Most of the respondent found

information was relevant (56%) from the respective sources to the decision-making. Most of the respondents (59.3%) attended training on farm tools and implements whereas other farmers attended training on soil health & fertility managements (35.3%), cultivation practices (5.3%), disease and pest management (4%) and post harvest management (2.7%). Awareness about improved farm tools was also enquired. In general it was found that 66 per cent of respondents heard about improved tools and implements for crop cultivation. 94.7 per cent respondents that they were willing to use improved tools if made available to them<sup>[4]</sup>.

**Table 3 Respondent having information about drudgery reducing improved farm tools & implements**

Name of the improved Responses tools % implements	Responses			
	Yes		No	
	No.	Percent	No.	Percent
Seed treating drum	68	68	32	32
Seed drill	78	78	22	22
Fertilizer broadcaster	18	18	82	82
Groundnut stripper	46	46	54	54
Sugarcane stripper	62	62	38	38
Bhindi plucker	34	34	66	66
Rotary maize sheller	89	89	11	11
Grain / dal mill	42	42	58	58
Hand operated chaff cutter with safety devices	33	33	67	67
Manual dibbler	19	19	81	81
Twin wheel hoe weeder	92	92	8	8
Improved sickle	73	73	27	27
Tubular maize sheller	63	63	37	37

**Table 4 Technologies adoption and access to information**

Particulars	No.	Percent
Major source of information		
Fellow farmer	38	38
Radio/ TV	82	82
Farmer associations	18	18
Family member	22	22
Governmental extension worker	12	12
Newspaper/Artical/ newsletters/ Extension literature	41	41
Agricultural publications/books	03	03
How relevant was the information		
Highly relevant	63	63
Relevant	32	24
Not relevant	04	04
Don't know	01	01

## Conclusion

The present study also revealed most respondents use traditional tools and implements since a long time and subsequently 60.0 % of respondents also faced difficulties & problem in using traditional tools and implements. They are however subsequently exposed to prone drudgery activities. This result implies that the respondents were least aware about improved drudgery reducing tools. The result of present study also suggests the importance of mode of information sharing and access to information. Respondents received information from

multiple sources which include fellow farmers, radio, television, extension officers, and NGOs. Radio / TV were major source of information. The encouraging result was that 66% of respondents heard about improved tools and implements for crop cultivation and most of the respondents (94.7%) were willing to use improved tools if made available to them. The need of the day is to empower women through technology so that they can have higher efficiency with work output and reduced drudgery and health problems.

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