

A paper on development and standardization of electronic booklet on indigenous knowledge about home practices

■ PRASANLATA ARYA AND RAJENDRA RATHORE

Received: 25.03.2017; Revised: 19.09.2017; Accepted: 05.10.2017

■ **ABSTRACT :** The present study was conducted in Bikaner district of Rajasthan. For selection of rural and urban respondents, two panchayat samities *i.e.* Bikaner and Nokha for rural and two zones *i.e.* east and west for urban was selected. The women above 50 years of age was selected from each village and each ward. A sample of 240 respondents comprising 120 respondents from rural area and 120 respondents from urban area were selected randomly. Further sixty literate women (30 rural + 30 urban) were selected for the effectiveness of e-booklet. The study was conducted in the four major aspect *i.e.* documentation of indigenous knowledge regarding home practices, expert opinion regarding documentation indigenous practices, development and standardization of e-booklet and field test of developed e-booklet. Findings shows that indigenous knowledge regarding food practices the majority of respondents were engaged in drying of clusterbeans (89.58%) in vegetable group (95.83%) were from rural area and (83.33%) were from urban area, prepared the pickle of green chilli by all rural and urban respondents with use of oil and condiments and the majority (70.83%) of urban respondents prepared *Amla* murabba and nimbusharbat with the use of sugar. All these practices considered logically correct by all expert. The developed e-booklet on indigenous knowledge was standardized on the basis of quality parameter was perceived quite high in terms of its content, format found reliable and applicable in the field. The readability and comprehension was also found high.

■ **KEY WORDS:** Indigenous Knowledge, Documentation, Practices, Development, Standardization

■ **HOW TO CITE THIS PAPER :** Arya, Prasanlata and Rathore, Rajendra (2017). A paper on development and standardization of electronic booklet on indigenous knowledge about home practices. *Asian J. Home Sci.*, 12 (2) : 355-359, DOI: 10.15740/HAS/AJHS/12.2/355-359.

See end of the paper for authors' affiliations

PRASANLATA ARYA
College of Home Science, S.K. Rajasthan
Agricultural University, BIKANER
(RAJASTHAN) INDIA
Email : 19prasanlata.arya@
gmail.com

Every social system has a rich storehouse of knowledge based on its soun, beliefs, norms and culture. Indigenous knowledge is unique to a given society, hence, the importance of it's cannot be neglected. Indigenous knowledge is developed and adopted continuously to gradually changing environments and passed down from generation to generation and closely interwoven with peoples cultural values. Gupta (2011)

stated that indigenous knowledge traits were oral, undocumented, simple, dependent over the values, norms and customs of the folk life, production of informal experiments through trial and error, accumulation of generation wise intellectual reasoning of day to day life experiences, loosed and rediscovered, practical rather than theoretical as well as asymmetrically distributed. IK was also regarded by several names, such as folk

knowledge, traditional knowledge, local knowledge, indigenous technical knowledge (ITK), traditional environmental/ ecological knowledge (TEK).

Indigenous knowledge is also the social capital of the poor, their main asset to invest in the struggle for survival, to produce food, to provide for shelter or to achieve control of their own lives. Women possess an enormous amount of knowledge about food production and processing, child rearing, clothing for family, managerial work for various family aspects, agriculture, natural resource management, human and animal care and various household works over the centuries. Therefore we can say that women certainly constitute a storehouse of indigenous knowledge by virtue of their accumulated experiences and practices that are unique to their culture and environment.

Documentation of such practices not only helps in probing the past but also help in bringing to light even fragmentary information on traditional method of our ancestor. Besides this, it would help to preserve for posterity the age old practices remain unrecorded and undocumented. Thus in this study investigator documented indigenous knowledge regarding food practices that is major activity done by the women in their life. All these practices strengthen with the strong logic given by experts of particular field so that obtained data has accuracy of these indigenous practices. There is need to develop an e-booklet on indigenous knowledge regarding home practice to increase knowledge and develop awareness about indigenous practices related to home activities and to strengthen the women to utilize these practices in their day to day life for better livelihood.

■ RESEARCH METHODS

The study was conducted in Bikaner district of Rajasthan which was selected purposely. There are six panchayat samities out of these two panchayat samities was selected randomly for rural locale *i.e.* Bikaner and Nokha. For urban local Bikaner city was selected. It was divided two zones like East and west. For the sample selection older women above 50 years of age was selected for the study. Thus total 120 respondents constituted the sample size from rural area and 120 respondents from urban area. Thus total 240 respondents were selected from rural and urban area. The interview schedule regarding indigenous knowledge about food practices was developed.

■ RESEARCH FINDINGS AND DISCUSSION

The findings of the present study as well as relevant discussion have been presented under following heads :

Documentation of the existing indigenous knowledge of the respondents regarding Food practices :

Food practices:

Under food practices, indigenous knowledge regarding food preservation was collected *i.e.* preserved by drying, by use of oil and condiments, by use of sugar included in the present study.

Food preservation :

By drying method :

It is observed from Table 1 that majority of the respondents were engaged in drying cluster beans (89.58%) in vegetable group followed by *Kakadia* (80.83%) in fruit group and dried processed food product *Saviyan* (78.33%) in cereal group and *Mangodi* (64.58%) in pulses group.

Cereal :

Majority of respondents (78.33%) were engaged in making *Saviyan* followed by *Rabodi* (45.83%), *Khichiya* (41.67%) and *Kurkure* (27.08%) by using various cereals. In urban area, 83.33 per cent respondents were engaged in making *Khichiya* followed by *Saviyan* (77.50%), *Kurkure* (54.17%) and *Rabodi* (20.83%) while in rural area, 79.17 and 70.83 per cent respondents were engaged in making *Saviyan* and *Rabodi*, respectively.

The reason given by the respondents behind preparation of *Rabodi*, *Khichiya*, *Kurkure* and *Saviyan* was that they used *Rabodi* in form of vegetable, *Khichiya* and *Khurkure* were used as snacks, *Saviyan* was used in preparing sweet dish (*Kheer*). Moreover these products are cheaper, save time, energy and money and are available through out the year.

Pulses :

In pulses 64.58 per cent and 52.50 respondents were engaged in making *Mangodi* and *Papad*, respectively. In urban area respondents were engaged in making *Mangodi* (87.50%) and *Papad* (80.00) while in rural area only 41.67 and 25.00 per cent respondents were engaged in making *Mangodi* and *Papad*, respectively.

The reason given by respondents behind the preparation of *Mangodi* and *Papad* was that they use *Mangodi* and *Papad* in the form of vegetable and *Papad* is also used as snack which is available through out the year. Moreover these products are cheaper, save time, energy and money.

Osunbitan *et al.* (2000) also stated that processing and preserving of food products greatly increase the value of perishable food stuffs by making them available for longer periods of time.

Fruit :

On overall basis majority of respondents (80.83%)

were engaged in drying *Kakadia* followed by *ber* (37.50%), raw mango (31.25%) and *Amla* (27.08%). In urban areas, 78.33 per cent respondents were engaged in drying *Kakadia* followed by 62.50 per cent respondents were engaged in drying raw mango. Further, 54.17 and 20.83 per cent respondents were engaged in drying *Amla* and *Ber*, respectively. In case of rural areas, 83.33 and 54.17 per cent respondents were engaged in drying *Kakadia* and *Ber*.

The reason given by the respondents behind drying of fruits was that fruits can be available round the year in this form as these are seasonal. Dried raw mango was used as amchur (mango powder) by the respondents

Table 1: Distribution of respondents by indigenous practices regarding food preservations by drying (n=240)							
Sr. No.	Indigenous practices	Urban respondent (n=120)		Rural respondent (n=120)		Total respondent	
		F	(%)	F	(%)	F	(%)
1.	Cereals						
	<i>Rabodi</i>	25	(20.83)	85	(70.83)	110	(45.83)
	<i>Khichiya</i>	100	(83.33)	-		100	(41.67)
	<i>Kurkure</i>	65	(54.17)	-		65	(27.08)
	<i>Saviyan</i>	93	(77.50)	95	(79.17)	188	(78.33)
2.	Pulses						
	<i>Mangodi</i>	105	(87.50)	50	(41.67)	155	(64.58)
	<i>Papad</i>	96	(80.00)	30	(25.00)	126	(52.50)
3.	Fruit						
	<i>Amla</i>	65	(54.17)	-		65	(27.08)
	Raw Mango(<i>Keri</i>)	75	(62.50)	-		75	(31.25)
	<i>Ber</i>	25	(20.83)	65	(54.17)	90	(37.50)
	<i>Kakadia</i>	94	(78.33)	100	(83.33)	194	(80.83)
4.	Vegetables						
	Clusterbean (<i>Guarphali</i>)	100	(83.33)	115	(95.83)	215	(89.58)
	<i>Sangari</i>	95	(79.17)	102	(85.00)	197	(82.08)
	<i>Ker</i>	95	(79.17)	102	(85.00)	197	(82.08)
	<i>Kachari</i>	95	(79.17)	102	(85.00)	197	(82.08)
	Round gourd (<i>Tinda</i>)	95	(79.17)	102	(85.00)	197	(82.08)
	<i>Lasoda</i>	73	(60.83)	13	(10.83)	86	(35.83)
	Green leafy vegetables						
	Fenugreek (<i>Methi</i>)	106	(88.33)	95	(79.17)	201	(83.75)
	Coriander (<i>Dhania</i>)	25	(20.83)	-		25	(10.42)
	Mint (<i>Pudina</i>)	95	(79.17)	-		95	(39.58)
	Beans						
	Cowpea (<i>Chawla</i>)	45	(37.50)	75	(62.50)	120	(50.00)
	Mothbean	45	(37.50)	75	(62.50)	120	(50.00)
	Moongbean	45	(37.50)	75	(62.50)	120	(50.00)
	<i>Phog</i> flower	5	(4.17)	30	(25.00)	35	(14.58)
	Neem flower (<i>Meenzer</i>)	5	(4.17)	30	(25.00)	35	(14.58)
	Potato chips	110	(91.67)	25	(20.83)	135	(56.25)

in many food preparation in place of tomato.

Vegetables :

On overall basis, majority of respondents (89.58%) were preserving the clusterbean through drying followed by fenugreek as green leafy vegetable (83.75%) and (82.08%) respondents were preserving *Sangari*, *Ker*, *Kachari*, round gourd through drying while, 50 per cent respondents were drying cowpea, mothbean and moongbean. Further, 39.58, 35.83, 14.58, 14.58 and 10.42 per cent respondents preserved mint (pudina), *Lasoda*, *Fog* flower, *Neem* flower (meenzer) and coriander through drying, respectively.

In urban areas, 88.33 per cent respondents preserved the fenugreek through drying followed by clusterbean (83.33%). The respondents (79.17%) preserved *Sangari*, *Ker*, *Kachari*, round gourd (*Tinda*) and mint (*Pudina*) through drying and (60.83%) were drying *Lasoda* while 37.50 per cent respondents were drying cowpea, mothbean and moongbean. Further 20.83, 4.17 and 4.17 per cent respondents preserved coriander, *Fog* flower and *Neem* flower (meenzer) through drying, respectively.

In rural areas, majority of respondents (95.83%) preserved the clusterbean through drying and followed by (85%) respondents preserved sangari, ker, kachari and round gourd through drying while each 62.50 per cent respondents were drying cowpea, mothbean and

moongbean. Further, 79.17, 25, 25 and 10.83 per cent respondents preserved fenugreek, *fog* flower, *Neem* flower (*Meenzer*) and *Lasoda* through drying, respectively.

In urban areas, 91.67 per cent and 20.83 per cent respondents per cent in rural area made chips. On over all basis 56.25 per cent respondents made chips and stored in dried form. According to them by drying the vegetable by this method they are available in off season too and are cheap and can be preserved longer periods. Moreover drying vegetables under shade helps to retain the colour. Potato chips were mainly used as snacks round the year.

More and less similar findings have been found by Mnzava (1998) stated that methods of preservation are very important deterrent to the wider utilization of vegetables.

Preserved by oil and condiments :

Making pickle :

Vegetable are preserved mainly in the form of pickle by using oil and condiments. It was followed by people from ancient time as it is simple and economical way of preserving food items. Since *Ker*, *Mango*, *Sangari*, *Lasoda*, *Lemon* and green chilli were popular in Bikaner region, hence, these products were especially used in preparing pickle.

Table 2 exhibits that all the respondents in urban

Table 2 : Distribution of respondents by indigenous practices regarding food preservations by oil and condiments (n=240)

Sr. No.	Indigenous practices	Urban respondent (n=120)		Rural respondent (n=120)		Total respondent	
		F	(%)	F	(%)	F	(%)
Making pickle							
1.	<i>Sangari</i>	90	(75.00)	75	(62.50)	165	(68.75)
2.	<i>Ker</i>	98	(81.67)	105	(87.50)	203	(84.58)
3.	<i>Kachari</i>	65	(54.17)	50	(41.67)	115	(47.92)
4.	Green mango	120	(100.00)	105	(87.50)	225	(93.75)
5.	<i>Lasoda</i>	120	(100.00)	105	(87.50)	225	(93.75)
6.	<i>Amla</i>	65	(54.17)	-		65	(27.08)
7.	Lemon	105	(87.50)	25	(20.83)	130	(54.17)
8.	Green chilli	120	(100.00)	120	(100.00)	240	(100.00)

Table 3 : Distribution of respondents by indigenous practices regarding food preservations by sugar (n=240)

Sr. No.	Indigenous practices	Urban respondent (n=120)		Rural respondent (n=120)		Total respondent	
		F	(%)	F	(%)	F	(%)
1.	<i>Amla Murabba</i>	85	(70.83)	-		85	(35.42)
2.	<i>Nimbu Sharbat</i>	85	(70.83)	-		85	(35.42)
3.	<i>Keri Pak</i>	45	(37.50)	-		45	(18.75)

areas prepared the pickle of green mango, *Lasoda* and green chilli followed by *Lemon* (87.50%), *Ker* (81.67%), *Sangari* (75%), *Kachari* (54.17%) and *Amla* (54.17%). In case of rural areas, cent per cent respondents prepared the pickle of green chilli and majority of respondents (87.50%) prepared the pickle of *Ker*, *Green Mango* and *Lasoda*. Further, 62.50, 41.67 and 20.83 per cent respondents prepared the pickle of *Sangari*, *Kachari* and *Lemon*, respectively.

On overall basis, highest percentage of respondents for preparation of green chillipickle while 93.75 per cent respondents prepared the pickle of green mango and *Lasoda*. Further, 84.58, 68.75, 54.17, 47.92 and 27.08 per cent of respondents prepared the pickle of *Ker*, *Sangari*, *Lemon*, *Kachari* and *Amla*, respectively. According to the respondents in pickle form vegetables can be stored for longer period and add variety in meal and can be used in meal when fresh vegetables are not available.

The findings are in concerned with the findings of Meena *et al.* (2012) who indicate that various value added product of indigenous arid fruit and vegetable such as *Sangari*, *Kachri*, *Ber*, *Ker*, *Lasoda* etc. in the form of pickle prepared by rural people of the hot region.

Preserved by sugar :

Food item preserved by use of sugar by the respondents were *Amla Murabba*, *Nimbu Sharbat* and *Keripak*.

The perusal of table highlights that majority of respondents in urban areas (70.83%) prepared *Amla Murabba* and *Nimbu Sharbat* and only 37.50 per cent prepared *Keri Pak*. But none of the rural respondents preserved food item by use of sugar. The logics behind

following indigenous practices given by the respondents was that it can be used round the year as they are seasonal fruit, more tasty and nutritious and help in digestion.

Conclusion :

Majority of the rural and urban respondents prepare various food products from different methods of preservations *i.e.* by drying (rabodi, saviyan, kurkure, papad, mangodi, clusterbean and kakadia etc.), by oil and condiments (pickle of green chilli, green mango, *Lasoda*etc) by sugar (*Amla Murabba* and *Nimbu Sharbat* and *Keripak* etc.).

Authors' affiliations:

RAJENDRA RATHORE, S.K.N. Rajasthan Agricultural University, JOBNER (RAJASTHAN) INDIA

■ REFERENCES

Gupta, Das A. (2011). Does indigenous knowledge have anything to deal with sustainable development ? Antrocom online *J. Anthropol.*, **7**(1) : 57-64.

Meena, S.R., Singh, R.S., Singh, and Maheshwari, S.K. (2012). "Rural wisdom in value addition and consumption pattern of indigenous and fruit and vegetable: participatory methodology technology development." Abstract in international conference on perspective of advances in natural resource management in agriculture, RSEE, Dec. 19-21.2012 p. 130.

Mnzava (1998). "Traditional methods of indigenous vegetable preservation." *ElimuAeilia*, <http://www.museum.or.ke>.

Osunbitan, J.A., Olushina, J.O., Jeje, J.O., Taiwo, K.A., Faborode, M.O. and Ajibola, O.O. (2000). "Involved in cassava and palm oil processing in the osun and On do states of Nigeria". *Technovation*, **20** (10) : 577-585.

12th
Year
★★★★★ of Excellence ★★★★★