

## Research Article

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# Knowledge gain by farm women through training programmes in Home Science conducted by Krishi Vigyan Kendra, Nizamabad

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## ABSTRACT

Women play a catalytic role in sustainable development bringing required transformational, economic, environmental and social changes. The majority of rural women suffer not only from economic poverty but also from information poverty especially related to household technologies and abilities to perform better as home managers. With utmost attention addressing the challenges, the women are facing in the present scenario like their disadvantaged and discriminated position with poor infrastructure, meager access to knowledge and information source, scanty livelihood promotion opportunities, inadequate mobility and communication facilities and sufficient health facilities the need of the hour. Technological innovations and their reach to rural women through training programmes can result in enhancing women's welfare leading to empowerment. Training is one of the important functions of Krishi Vigyan Kendra. The main purpose of organizing training programmes is to impart knowledge and develop new skills required for the adoption of the latest technology and build up attitude among farmers, farm women, rural youth, school dropouts and other grass root level workers. In this direction, the present study was undertaken to find out the knowledge gained by farm women through a series of training programmes in Home science conducted by Krishi Vigyan Kendra, Nizamabad to find out livelihood changes brought at individual and field levels through future impact studies. On-campus training programmes were conducted at the KVK training hall and the off-campus training programmes were conducted at KVK adopted villages by SMS (Home Science) working at KVK Nizamabad from 2015-16 to 2018-19 (4 years) under the guidance of the Programme Coordinator. A total of 56 training programmes fewer than eleven (11) thematic / training areas were conducted training 2589 women trainees during the study period. Pre-evaluation and post-evaluation tests were conducted in every training programme and scores were obtained respectively to calculate the gain in knowledge. An average knowledge gain of four years found was 68.75 percent. Women were trained mostly on the thematic areas viz., Women empowerment, Location-specific drudgery reduction technologies, Value addition, Women and child care and Design and development of low/minimum cost diet.

**Keywords:** Women trainee, Training programme, Knowledge gain, Home science, kitchen gardening and nutrition gardening, Design and development of low/minimum cost diet, Designing and development for high nutrient efficiency diet, Minimization of nutrient loss in processing, Gender mainstreaming through SHGs, Storage loss minimization techniques, Value addition, Income generation activities, Women empowerment, Location-specific drudgery reduction technologies, Rural crafts, Food adulteration and Women and child care.

## INTRODUCTION

Women comprise more than 50 percent of the world's population. They play a catalytic role in sustainable development bringing required transformational, economic, environmental and social changes. A total of 1.7 billion women and girls live in rural areas making 43 percent of the agricultural

force in developing countries [4]. Women significantly contribute to agricultural production, food and nutritional security, land and natural resource management, and building climate resilience [3]. As per the Census of India (2011), women constitute 48 percent of Indian population out of which 78 percent are engaged in agriculture which is the mainstay of the rural Indian economy. Though women represent only 50 percent of the total population, they contribute 75 percent to the development of our society while men contribute only 25 percent [5]. The majority of rural women suffer not only from economic poverty but also from information poverty especially related to household technologies and abilities to perform better as home managers. With utmost attention addressing the challenges, the women are facing in the present scenario like their disadvantaged and discriminated position

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with poor infrastructure, meager access to knowledge and information source, scanty livelihood promotion opportunities, inadequate mobility and communication facilities and in sufficient health facilities is the need of hour. Information reach on home technologies through well-designed training programmes can empower women on multiple levels. Technological innovations and their reach to rural women through training programmes can result in enhancing women's welfare leading to empowerment. Low-cost, reliable homestead technologies related to nutrition, health and sanitation, drudgery reduction, post-harvest technologies etc. can provide a great leap forward for meeting rural women's practical needs for reducing their drudgery, increasing their efficiency and improving family's health condition [1]. Training women on Home science technologies help to sustain themselves through self-employment making them self-reliant and economically protecting them from migration to the urban areas.

The Krishi Vigyan Kendra (KVK), Nizamabad was established in 2004 to address specific agricultural problems. Apart from agriculture, the focus is also on food nutrition, processing, storage and utilization of crop and livestock production, to raise women's income and living standards through business-oriented farming and processing strategies. Ever since the establishment of the KVK with the emphasis on participatory extension, various efforts have been made to elicit various types and levels of information on women's status through various strategies so as to improve their living conditions and conduct training programmes on home technologies assume greater importance.

Training is one of the important functions of Krishi Vigyan Kendra. The main purpose of organizing training programmes is to impart knowledge and develop the new skill required for the adoption of the latest technology and build up attitude among

farmers, farm women, rural youth, school dropouts and other grass root level workers. [7] In this direction, the present study was undertaken with the objective to find out the Knowledge gained by farm women through a series of training programmes in Home science conducted by Krishi Vigyan Kendra, Nizamabad so as to find out livelihood changes eventuated at individual and field level through future impact studies. This would enable the SMS (Home Science) to analyze on the applicability of training programmes at the individual level and the extent of improvements that transpired in their living conditions

## Materials and methodology

The present paper describes knowledge gain by farm women through a series of training programmes, off-campus and on campus conducted by SMS (Home Science) at KVK Nizamabad from 2015-16 to 2018-19. A total of eleven (11) thematic / training areas selected for conducting training programmes include Household food security by kitchen gardening and nutrition gardening; Design and development of low/minimum cost diet; Designing and development for high nutrient efficiency diet; Minimization of nutrient loss in processing; Gender mainstreaming through SHGs; Storage loss minimization techniques; Value addition; Income generation activities for empowerment of rural women; Location specific drudgery reduction technologies; Rural Crafts; Food Adulteration and Women and child care. These training programmes were finalized by experts of College of Home science, Professor Telangana State Agricultural University and ATARI-ICAR, Zone-X, Hyderabad during various technical meetings and sought approval. The on-campus training programmes were conducted at KVK training hall and the off-campus training programmes were conducted at KVK adopted villages. These adopted villages areas under.

Name of adopted villages	Name of mandal	District
Jalalpur, Laxmapur, Sankora, Vakheel farm	Varni	Nizamabad
Suddulam, Rampur, Takli, Sunkini and Hegdoli	Kotagiri	
Neela	Renjal	
Rythunagar, Kistapur, Thimmapur, Mirzapur, Chincholi	Birkur	Kama Reddy

The identified training programmes were mainly confined to OFTs, and FLDs. Every training programme was followed proper need assessment exercise. Apart, the interest of women to attend training programmes was also considered while identifying the trainees. The content was developed carefully with proper refinement by adding and deleting over previous years based on raised need. Need-based training methods were used viz., interactive lectures, lecture cum discussions, brainstorming, role play, method demonstration, group discussion, skill teaching extension talk etc.

A total of 56 training programmes were conducted in four years viz, 2015-16, 2016-17, 2017-18 and 2018-19 and trained 2589 women farmers in the identified thematic/training areas. Care was taken to eliminate the women who attended the same training programme earlier to reach benefits to more women. A simple questionnaire was developed to conduct Pre and Post evaluation (before start and after the completion of sessions) and thoroughly checked every question for its validity. The interactive training sessions were started after registration, ice-

breaking exercise, need assessment, and experience sharing among trainees with recall and recap sessions at the beginning and end respectively. The duration of training programmes ranged from one day to four days. Majority of the training programmes were one day training programmes and conducted all the years. Based on demand from women farmers few training programmes were repeated the same year twice, trice and tetrad.

Pre-evaluation and post-evaluation was conducted in every training programme and scores were obtained respectively to calculate the gain in knowledge. Frequencies and percentages were used to calculate Knowledge gain using the below formula.

Post-evaluation score - Pre-evaluation score  
 Knowledge gain = ----- X 100  
 Maximum possible score - Pre-evaluation score

Maximum possible score = Maximum set for evaluation X No. of participants.

Knowledge gains 60 and above was considered as more knowledge gain. The year-wise average knowledge gain and overall knowledge gain was also calculated.

## RESULTS AND DISCUSSION

The Table 1 shows that seventy-three (73%) of women gained knowledge in location-specific drudgery reduction technologies followed by value addition (70%), design and development of low-cost diet (69%), Income generation activities for empowerment of rural women (68%), equal percent(67%)in Rural crafts and Women and child care and (66%) in Household food security by kitchen gardening and nutrition gardening during 2015-16

The Location specific technologies imparted to women of adopted villages where they could gain knowledge to the extent of 73 percent were Use of rolling brush for stem application in cotton and Use of protective clothing while spraying observed throughout the year 2015-16. Knowledge of these technologies was imparted through training programmes which were conducted in connection to On Farm Tests and Front Line Demonstrations on drudgery reduction technologies. Seventy-three percent gains in knowledge could be attributed to the use of training methods like method demonstrations, group discussions and skill teachings by the SMS (Home science) under the guidance of the Programme Coordinator. Farm women gaining knowledge on value addition to the extent of 70 percent could be attributed to practical demonstrations conducted on the preparation of value-added products like soybean, millet, fruits and vegetables. The training area Design and development of low/minimum cost diet dealt with the preparation of low-cost foods with locally available food materials. The training programme was on low-cost food preparation mostly given to women on the occasion of National Nutrition week which were conducted every year during the first week of September and breastfeeding week celebrations in the first week of August.

The training area, Income generation activities led to the empowerment of rural women with knowledge gain of 68 percent as the Home scientist focused on the preparation of the product Pushti weaning mix for combating malnutrition among infants after realizing attractive results in OFTs and FLDs followed by motivating the women with documented success stories. These efforts of a Home scientist would enable rural women to start entrepreneurship on making and selling pusti weaning mix and help them realize assured monthly income to support the family financially.

Gaining post evaluation score high in the Women and child care training area could be attributed to the Home Scientist practical and effective delivery of sessions to the farm and rural women on precautions to be taken during pregnancy period and the importance of iron rich foods, the importance of vaccination and use of play materials for pre-school children topics etc. which she learnt by attending every programme of Anganwadi centers at adopted villages. These anganwadi worked well for the benefit of pregnant women, lactating mothers, new born infants and pre-school children topics etc.

The women gained knowledge 73 percent on Rural crafts like preparation of low-cost photo frames to rural youth as income generating activity as Home Scientists have undergone training programme on Floral crafts at the College of Home Science, Saifabad, Hyderabad

In the adopted villages most of the women had an interest on Kitchen gardening in their own house premises organically but they encountered the problem of non-availability of quality seeds where KVK assumed the role for different vegetable seeds

like palak, methi, amaranthus, bhendi, ridge gourd, round guard and tomato for household purpose through this training imparted knowledge on vegetable crop production techniques practically. This resulted in 66 percent knowledge gain.

The results are in line with the results of [6] where they reported after intervention rural women had acquired knowledge on selected Home Science indicates when educational efforts by way of any intervention including training programmes are exerted, it upgrades the knowledge and same might be the contributing 69 percent Average Knowledge gain of the women trainees during the year 2015-16.

Table 2 showed that during the year 2016-17 the knowledge gain of farm women and rural women was more in the training areas viz., women empowerment (73%), Rural crafts (73%), Kitchen gardening (73%) and design and development of low-cost diet (73%) followed by an equal gain in knowledge (67%) on value addition and women and child care and (60%) in the area of design and development for high nutrient efficiency diet. The results indicate an increasing trend in the Knowledge gain in the same thematic areas conducted the previous year. This is quite an encouraging result that could probably be attributed to more practical-oriented training sessions conducted by home scientists based on feedback received from trainees of previous training batches and experience gained by them. The programme coordinator's effort in the documentation of many successful technologies to motivate and lead women towards entrepreneurship through the sessions conducted in the training programme resulted in more knowledge i.e 73 percent.

The gain in knowledge (73%) by rural youth and women in the area of Rural craft was due to undergoing training in tailoring and embroidery for 4 days at Krishi Vigyan Kendra leading them to self-employment. The women also got trained on the preparation of low-cost play material with the available material in their homes for their preschool children. They gained more knowledge in the preparation of low-cost play materials like shape boxes, colour boxes, beads, round wings etc. as indicated in table 2.

Women of the adopted villages gained knowledge 73 percent in Kitchen gardening as KVK Home scientist provided vegetable seeds to adopt kitchen gardening in their back yard and disseminated knowledge on production techniques and documented some success stories. The women satisfied with the seeds provided by the KVK were palak, amaranthus, gogu, bhendi, round guard, ridge guard, bottle guard, bitter guard each seed in 5 gms quantity in a packet in practical sessions. The central government also focused on nutrient-sensitive programmes for the welfare of the farming community through KVK.

Training on the Design and development of low-cost diet shows that the SHG women in the adopted villages of KVK gained 73 percent knowledge on the preparation of value-added products like millets, soybean, and pulses to improve the health status of children and women. Preparation of Pushti weaning mix was demonstrated in a training programme for the prevention of malnutrition and raagi laddu (Finger millet) to improve hemoglobin level among adolescent girls, pregnant women and lactating mothers as a low-cost diet. Sessions on the importance of consumption of drumstick leaf powder, curry leaf powder, kichidi, and leafy vegetable juices also attracted the attention of the women for their health benefits slow cost food.

Concerning Value addition farm women trained in the areas of pulses, fruits and vegetables, millets and rice. The women farmers in the adopted villages of Rythunagar, Akbarnagar, Takli, Boppapur, Raikur and Hungargawere activeas they were educated where they enthusiastically participated in practical sessions and gained knowledge in preparation of value-added products like Raagi laddu, pushti weaning mix, drumstick leaf powder, raagi malt, pickles, sauces, jams and murukulu by gaining 67 per cent knowledge The adopted villages of Rythunagar, Akbarnagar, Takli, Boppapur, Raikur and Hungarga had excellent anganwadi workers working for the welfare of women and children under ICDS programme. KVK Home scientists are actively involved in all the programmes of ICDS like Breastfeeding week celebrations, Nutrition Week, Poshan Abhiyan, Vaccination, Adolescent programmes, preschool children activities and sector meetings which helped to train the women practically. Concerning High nutrient diet, the women had sixty percent knowledge as they have less time to prepare and procure foods for highly nutritious diet preparation. Women were trained on the topics of preparation of mixed fruits jam, mixed nuts laddu, mixed vegetable curries, rice value-added products, millet value added products and pulses value-added products. In the feedback, women expressed, the villages are far away from cities, Hence procurement of food and storage as their problems.

Similar findings were reported by [6] which it showed a significant gain in knowledge on all the components of nutrition (balanced diet, weaning food, conservation of nutrients, preservation of nutrients, hygiene, deficiencies, source, food fads and fallacies) that are included in the training program me. 69percent was the average knowledge gain of the women trainees during the year 2016-17.

The results in Table 3 describe that the farm women gained knowledge in equal percentage (72%) in the training programmes Processing and cooking and Life skills in day to day living followed by seventy per cent (70%) knowledge gain equally in the areas of Women and child care and Protective clothing; Specific drudgery reduction technologies (68%), Value addition (66%), Women empowerment (65%), Design and development of low-cost diet (63%), and Household food security by kitchen gardening and nutrition gardening (60%).

During the year 2017-18, KVK home scientists conducted a training programme on the direct need of the majority of the women in the area of Processing and cookingand delivered knowledge on primary food processing to make most foods edible, and secondary food processingto processthe ingredients into familiar foods such as bread. Tertiary food processing has been subjected to criticismwhich is promoting overnutrition and obesity, containing too much sugar and salt, too little fibreand otherwise being unhealthful in respect to the dietary needs of humans and farm animals. Cooking topics coveredinclude baking, roasting, frying, grilling, barbecuing, smoking, boiling, steaming and braising.

ConcerningLife skills in day-to-day living, it was given to rural youth and discussed meaning and importance of life skills in every movement that impact their physical and emotional health. Life skills covered include the ability to manage emotions, health, finances, relationships and their performances etc. The post-evaluation score in this trainingwas high as they have shown more interest on the topic.

The training programme onProtective clothingresulted in new to women basing its importanceon health women got more knowledge (70%). Protective clothing that includes cap, old

shirt, gloves, mask and sunglasses protects the individual from pesticide inhalation, and decrease the health hazards and morbidity pattern over some time. This training programme was conducted as a part of On-Farm Test on Protective clothing in the adopted villages of KVK and distributed materialfor protective clothing to the trained farm women who were frequently involved in the spraying. The content for training on protective clothing was suitability, comfortability, durability, adoption feasibility and morbidity pattern of protective clothing while spraying.

Seventy percent of knowledge gain by women in training area Women and child careas Table 3delineates, women had a great involvement in women and child care programmes which were regularly organized by ICDS Anganwadi centers. Seventy percent of knowledge gain could also be attributed to their quick understanding on the content as they have already exposedtobreastfeeding week celebrations, nutrition week, p o s h a n m a h a n , N A R I , s w a c h a t h a p a k w a d a , harithaharamprogramme, vaccination, vitamin deficiency programmeetc., Rural women and farm women had more interest on these programmes and actively involved in the sessions.

Location-specific drudgery reduction technologies with 68 percent Knowledge gain states women's familiarity with performance assessment of work efficiency of easy transplanter in tomato, assessment of seed drill for sowing in maize by farm women, use of a rolling brush for stem application in cotton, the introduction of knitted gloves to combat occupational health hazards for bhendi pickers, use of protective cloths while sprayingfor drudgery reduction etc. onwhich KVK conducted OFTs and FLDs and as a part of these, KVK conducting training programmes. Women who attended these training programmes gained knowledge on these technologies, tomatotransplanter (easy transplanter) for saving time, and money, and reduce drudgery while transplanting and in seed drill learnton land preparation techniques, type of soils suitable, how to use seed drill for different types of seeds for sowing. Women gained knowledgeon the benefits of using rolling brush viz.,less time-consuming, requirement of chemical dosage (250ml), less no. of labour requirement (1 person), less investment (Rs.1050/-), no environment pollution, only harmful insects getting killed, physical stress minimization. Concerning knitted gloves women gained knowledge on its uses like no itching sensation, high work efficiency, ease to wear &removal, protection from other hazardsand less cost. The farm women got awareofthe benefits of using technology likereduction in nausea, and vomiting, no headache, reduction of skin allergy, reduction of breathlessness, easeofadoption etc.

Women empowerment training programmeshows sixty-five percent knowledge gain among trained women. Krisi Vigyan Kendra focused on women'sempowermentwhere home scientists motivated SHG women to attend training which enable them to initiate startups on preparation and selling of pushti weaning mix, raagi laddu, drumstick leaf powder, rolling brush and protective clothing as micro-enterprises.The women were trained on these product preparation techniques and the steps to starting an enterprise on their own.

ConcerningDesign and development of low-cost diet the women of adopted villages Rythunagar, Annaram, Takli, Desaipet, Akbarnagar, Boppapur and Hungarga gained knowledge by 63 per centon the low-cost diet with locally available food material

to improve the health status of vulnerable groups. Women also learnt the importance of a balanced diet, thali, iron-rich foods and different age group diet patterns.

Sixty percent of knowledge was gained by the SHG women in the area of value addition. In this training, women were trained on the importance of value addition for better health among infants, pre-school children, adolescents, and pregnant and lactating women. Women trained on the topics of preparation of value-added products of millets, pulses, oil seeds, fruits and vegetables etc.

With regard to household food security by kitchen gardening and nutrition gardening, sixty percent was gained by the farm women which shows women's interest in kitchen gardening to improve health and wealth during pandemic situations. They were also provided various seeds packed in a packet for household maintenance by KVK during practical training. The seeds provided were tomato, chilli, greens, methi, palak, bottle gourd, ridge guard etc.,

The results are also in conformity with the results of [8]. The other possible reason might be the training environment that was created providing enough experiential learning through demonstrations with the supply of printed material. Anganwadi workers, Supervisors, ASHA workers and SHGs women discussing these aspects with exposure to mass media like radio and television for getting awareness might have contributed to 67 percent Average Knowledge gain of the women trainees in the training programmes conducted during the year 2017-18.

Table 4 depicts that women gained knowledge in the areas of Women empowerment (73%), followed by Location specific drudgery reduction technologies (71%), Designing and development for high nutrient efficiency diet design (66%) and Development of low-cost diet (65%). The per cent knowledge gain observed in other training programmes viz., Awareness on welfare schemes available for youth 75, Protective clothing for pesticide application 74, Awareness on insurance for crops and live stocks 73, Demonstration on protective clothing 73, Demonstration on instant idly preparation 71, Demonstration on protective clothing 70, Importance of Low Glycemic Index foods to SHG women 69, with equal percent of knowledge gain i.e 67 in Demonstration on fertilizer applicator and Demonstration on low glycemic foods preparation, Demonstration on dosa making with drumstick leaf powder resulted in 67 knowledge gain, Income generating activities on millets to unemployed youth (66%), and Demonstration on the nutritional garden (65%) during 2018-19.

Training programme on Women empowerment with 73 percent knowledge gain by women depicts KVK'S inquisitiveness to focus on entrepreneurship development where the SMS (Home science) explained the home technologies practically with her experience gained through her hard and determined efforts put in under the encouragement of Programme coordinator at KVK adopted villages aiming to improve their living standards. The training sessions covered the technologies viz., pushti weaning mix, ragi laddu, drumstick leaf powder and protective clothing and rolling brush. These women empowerment training programme effectively created interest among SHG women where few women expressed their interest to start micro-entrepreneurship on these technologies.

In the training programme Location specific drudgery reduction technologies 71 percent knowledge gain was observed. The women and farmers shown interest in attending training

programme on drudgery-reducing technologies like seed drill for sowing seeds, seed cum fertilizer bags, easy transplanter for transplanting tomato seedlings, knitted gloves for bhendi plucking, harvest bag for picking cotton, rolling brush stem applicator, fertilizer applicator in cotton and protective clothing as they were briefed by previous trainees on the usefulness and effective conduct of training programmes by KVK. As these technologies were very useful to farm women folk, women came forward to attend and learn these drudgery reduction technologies practically in their fields bringing some training input on their own.

Designing and developing of high nutrient efficiency diet design with 66 percent knowledge gain enlightened the women on benefits of high nutrient efficiency diet design organized under central government programme Poshanabhiyan with the coordination of women and child department officials at adopted villages and KVK office as both on and off campus training programmes. The women gaining knowledge on high nutrient diet includes mixed vegetable jam, jelly, murabba, guava gel, green leafy vegetables juices, dry fruit laddu and millets mixed powder, fish pickle making and prawns pickle making etc.,

The training area Development of low-cost diet trained women on scope of locally available food materials for food preparation to increase health of the vulnerable group viz., women, adolescents, pregnant women and lactating mother, pre-school children and infants and enabled them to gain knowledge by 65 percent. Pushti weaning mix and preparations with balamrutham like cake, dosa, roties, biscuits, halwa and burelu were demonstrated to improve physical and mental health of the children. Millet value added product preparations like raagi laddu, raagi java, jowar murukulu, soyabean value added products, rice value added products were also demonstrated which added to their knowledge gain.

Under NARI (Nutri-Sensitive Agri-resources & Innovations) programme KVK conducted many programmes in Suddulum village of Kotagir Mandal selected for NARI programme as per the instructions of ICAR-ATARI, Hyderabad. Under this programme tribal women were trained on the topics like a demonstration on protective clothing, demonstration on instant idly preparation, demonstration on protective clothing, importance of Low Glycemic Index foods to SHG women, demonstration on fertilizer applicator and a demonstration on low glycemic foods preparation, demonstration on dosa making with drumstick leaf powder, Income generating activities on millets to unemployed youth, demonstration on nutritional garden. In addition, conducted method demonstrations on preparation of instant idly, low glycemic index foods like brown rice, ragi dosa by mixing drumstick leaf powder and income generating activities with millets viz., biscuits, cakes, rolls etc.,

Some other training programmes were also conducted for farmers and farm women on protective clothing, fertilizer applicator, and nutritional garden as these were effective home science technologies and appealed the trainees to in turn spread the learning in the adopted villages of KVK and farming community to spread horizontally in the farming community.

The multi-disciplinary approach of the KVK objective also implemented in these training programmes as the Home Scientist involved each and every scientist in home science training programme which was explained as follows for conducting of kitchen gardening training programme involved Horticulture scientist, for protective clothing and rolling brush involved Entomology scientist and drudgery reduction

technologies Agronomy scientist involved for seed rate and crop cultivation practices and also involved Agricultural Extension subject scientist for preparation of schedules for conducting agriculture related topics in Home science training programmes and programme coordinator involved from the stage of action plan of training programmes, implementation stage, schedule preparation stage, data collection stage and evaluation stage and final documentation stage like -wise multi-disciplinary approach of training programmes were conducted in KVK including on and off campus programmes.

The results are parallel with the results of [2] also showed that after training programme there was increased awareness about human nutrition among the tribal women.

The results are similar with the results of [9] where majority of the respondents (54.16%) had medium level of knowledge, followed by high (38.33 %) level of knowledge and few respondents (7.50%) had low level of knowledge on the Importance of food and food pyramid. During the year 2018-19 well designed training programmes might have contributed to realize 70 percent average knowledge gain of the women trainees.

## CONCLUSION

Women's empowerment is a right. Accomplishing this right through various strategies addressing the challenges the women are facing is utmost important. The most pressing challenges of our time like their disadvantaged and discriminated position with poor infrastructure, meagre access to knowledge and information source, scanty livelihood promotion opportunities, inadequate mobility and communication facilities and insufficient health care facilities still holding too many women back, hindering nation's

prosperity. Training help women gain new knowledge and skill and change attitude to improve their competence, capacity, and performance. The most effective training also help women apply the gained knowledge and information to improve their living conditions. In this direction, KVK, Nizamabad conducted a series a total of 56 training programmes under eleven (11) thematic / training areas viz., Women empowerment, Location specific drudgery reduction technologies, Value addition, Women and child care and Design and development of low/minimum cost diet training 2589 women trainees during the study period and figured out 68.75 percent average knowledge gain. This would enable the SMS (Home Science) to analyze on applicability of training programmes at individual level and the extent of improvements transpired in their living conditions through future impact studies.

### Future scope of the study:

The study would enable to research extent of livelihood changes transpired and eventuated along analyzing applicability of training programmes at individual and field level through futuristic impact studies.

### Conflict of interest:

Authors declare that there is no conflict of interest in the study.

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**Table1. List of training programmes conducted along with no of trainees, pre and post evaluation score and knowledge gain during the year 2015-16.**

S.No	Thematic area	No. of Training programmes	Total no. of trainees	Pre evaluation score	Post evaluation score	Knowledge gain (%)
1.	House hold food security by kitchen gardening and nutrition gardening	1	38	78	276	66
2.	Design and development of low/minimum cost diet	1	107	247	817	69
3.	Value addition	2	148	326	1135	70
4.	Income generation activities for empowerment of rural women	1	87	193	656	68
5.	Location specific drudgery reduction technologies	3	181	403	1426	73
6.	Rural Crafts	1	69	137	509	67
7.	Women and child care	4	151	334	1125	67
<b>Total</b>		<b>13</b>	<b>781</b>	<b>Average knowledge gain=69</b>		

**Table 2. List of training programmes conducted along with no of trainees, pre and post evaluation score and knowledge gain during the year 2016-17.**

S. No	Thematic area	No. of Training programmes	Total no. of trainees	Pre evaluation score	Post evaluation score	Knowledge gain (%)
1.	Household food security by kitchen gardening and nutrition gardening	1	50	106	392	73
2.	Design and development of low/minimum cost diet	1	34	67	266	73
3.	Designing and development for high nutrient efficiency diet	1	36	77	248	60
4.	Value addition	3	86	180	636	67
5.	Women empowerment	2	93	195	728	73
6.	Rural Crafts	2	54	105	423	73
7.	Women and child care	3	53	110	392	67
<b>Total</b>		<b>13</b>	<b>406</b>	<b>Average knowledge gain=69</b>		

**Table 3. List of training programmes conducted along with no of trainees, pre and post evaluation score and knowledge gain during the year 2017-18.**

S. No	Thematic area	No. of Training programmes	Total no. of trainees	Pre evaluation score	Post evaluation score	Knowledge gain (%)
1	Household food security by kitchen gardening and nutrition gardening	1	37	83	254	60
2	Design and development of low/minimum cost diet	1	34	61	237	63
3	Processing and cooking	1	27	53	209	72
4	Life skills in day to day living	1	40	94	313	72
5	Value addition	1	104	210	760	66
6	Women empowerment	1	35	72	254	65
7	Location specific drudgery reduction technologies	2	71	151	530	68
8	Women and child care	1	102	226	783	70
9	Protective clothing	2	175	379	1333	70
<b>Total</b>		<b>11</b>	<b>625</b>	<b>Average knowledge gain=67</b>		

**Table 4. List of training programmes conducted along with no of trainees, pre and post evaluation score and knowledge gain during the year 2018-19.**

S. No	Thematic area	No. of Training programmes	Total no. of trainees	Pre evaluation score	Post evaluation score	Knowledge gain (%)
1.	Design and development of low/minimum cost diet	2	90	200	656	65
2.	Designing and development for high nutrient efficiency diet	3	66	142	484	66
3.	Women empowerment	1	66	137	521	73
4.	Location specific drudgery reduction technologies	1	49	109	381	71
5.	Importance of Low Glycemic Index foods to SHG women	1	84	182	638	69
6.	Awareness on insurance for crops and live stocks	1	19	43	150	73
7.	Protective clothing for pesticide applicators	1	24	51	190	74
8.	Awareness on welfare schemes available for youth	1	21	49	170	75
9.	Demonstration on fertilizer applicator	1	36	81	268	67
10.	Demonstration on protective clothing	1	21	56	169	73
11.	Demonstration on low glycemic foods preparation	1	18	39	133	67
12.	Demonstration on nutritional garden	1	20	53	148	65
13.	Demonstration on instant idly preparation	1	120	269	932	71

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