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# Unheard Voices of Vulnerable Groups in Kalyan-Karnataka: Challenges and Way Forward

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**Abstract**

Hyderabad Karnatka (1948) recently renamed as Kalyan Karnataka (2018) has all the 35 taluks classified as Most Backward, Most Backward, Backward and Relatively Developed Taluks based on Composite Degradation Index as per the reports of Prof. Nanjudappa Committee. Among the taluks of Kalyana (Hyderabad) Karnataka region, 22 taluks are classified as most backward, 5 taluks as very backward and 2 taluks as backward taluks. This classification is based on the report Dr. D M Nanjundappa as a Chairman of the High Powered Committee for Redressal of Regional Imbalance (HPCRRI). On the basis of 35 socio-economic indicators, assessed the level of development of 175 taluks in the state. These indicators were spread over various sectors such as agriculture, industry, economic infrastructure, social infrastructure, and financial and technical infrastructure. The socio-economic indicators include health & education, Labour & Social Welfare, Women & Child Development. This paper focuses on women and children as vulnerable groups, and is based on the experiences of the author while working in Raichur district. The discussions are classified into three sections I. Childhood Malnutrition in Raichur: Stories from the Heart of the Community II. Women in Farming: Key Lessons from Raichur's Experience III. Nurturing Women's Entrepreneurship in Agriculture

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A group is generally considered as vulnerable if they are disadvantaged in comparison with other. In India there are certain groups of human beings which either by nature or because of deep-rooted custom is weak and vulnerable, such as, Women and Children disabled persons etc. Vulnerability in a social and economic context refers to the susceptibility of individuals or groups to harm due to their exposure to various risks. Children, women and the elderly are frequently categorized as the most vulnerable due to their unique physical, social and economic characteristics that make them more susceptible to harm. Scheduled Castes (SC), Scheduled Tribes (ST), Disabled, Poor migrants, People living with HIV/AIDS and Sexual Minorities are also other vulnerable groups. However, they being human beings do possess human rights and fundamental freedoms. But their rights have been violated very frequently by the dominant section of the society.

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**Childhood Malnutrition in Raichur: Stories from the Heart of the Community**

The burden of malnutrition is 'unacceptably high and progress unacceptably slow' according to the recent global nutrition report. The report notes that of all the children under 5 years of age across the world, 150.8 million are stunted, 50.5 million are wasted, and 38.3 million are overweight. It also points out the criticality of malnutrition, which is responsible for 45% of deaths among children under 5 years of age (mostly in low- and middle-income countries) and 4 million deaths and 120 million healthy years of life lost due to overweight and obesity across the globe (Global Nutrition Report, 2018). India has continuously fared poorly in nutritional indicators and bears one of the largest malnutrition burdens across the globe. According to the Global Nutrition Report of 2020, 34.7% of India's children under 5 are affected by stunting, while more than 50% of women aged 15 to 49 years suffer from anaemia1 . Stunting (low height-for-age) is the leading population measure of chronic under nutrition (UNICEF, 2017) and has been included as a key indicator under the Sustainable Development Goals (SDGs) (Target 2.2). Childhood under nutrition has been linked to shorter adult height, less schooling, reduced economic productivity and for women lower offspring birth weight (Victora *et al.*, 2008). Therefore, malnutrition exists in an intergenerational cycle, and malnourished mothers are more than twice as likely to have stunted children as well-nourished mothers. Stunting and underweight in childhood also negatively affects productivity, occupational status and wages (Mcgovern *et al.,* 2017). In addition to stunting, wasting and being under-weight, micronutrient deficiencies affect nearly 2 billion people worldwide (IFPRI, 2017). Deficiencies of iodine, iron, vitamin A, zinc, and folic acid are those most identified in populations and have significant impacts on health and human capital

People are malnourished if their diet does not provide adequate calories and protein for growth and maintenance or they are unable to fully utilize the food they eat due to illness (undernutrition). They are also malnourished if they consume too many calories (overnutrition)." UNICEF. According to World Bank report Malnutrition is a contributing factor in over 50% of deaths in children under five". Karnataka faces significant challenges with malnutrition, particularly among children. According to the National Family Health Survey (NFHS-5) data from 2019-2021, the state has a high prevalence of undernutrition among children under five years old. The survey indicates that 29 out of 30 districts in Karnataka have a public health concern regarding stunting, anemia, and wasting among children. The malnutrition is linked to morbidity and reproductive health issues, which are interwoven in vicious cycle of poverty. Overall, Karnataka's MMR has declined from 83 per lakh live births in 2017-18 to 69 in

2018-203. However, recent data shows that the state recorded 348 maternal deaths till November 2024, with 217 cases reported in just four months.

Reproductive health in Karnataka is influenced by various factors, including access to healthcare services, education, and socio-economic conditions. The NFHS-5 report highlights that 69% of married women aged 15-49 years use some method of contraception, an increase from the 52% noted during NFHS-4. However, challenges such as anemia among pregnant and non-pregnant women, obesity, and low body mass index persist. Reproductive health services in Raichur are available, but challenges remain. The district has several healthcare facilities, including fertility clinics and gynecologists, that provide reproductive health services. However, issues such as anemia among pregnant women, lack of awareness about reproductive health, and limited access to quality healthcare services continue to affect the overall reproductive health outcomes in the region.

According to recently held NFHS-5, the situation with regard to maternal and child health is encouraging when compared to NFHS-4 i.e., reduction in IMR from 28 to 25 per 1,000 live births, 97 per cent of women who gave birth received antenatal care, among children between the ages of 12-23 months, 84 per cent had received all the basic government recommended vaccinations about 13 per cent were partially vaccinated, about 35 per cent of children under five years of age were stunted (too short for their age), 20 per cent were wasted (too thin for their height), and 33 per cent were underweight. Two-thirds (65.5 per cent) of children of 6-59 months were anaemic This is an increase from the 61 per cent recorded in NFHS-4. About 47.8 per cent of women and 19.6 per cent of men (aged 15-49 years) surveyed in Karnataka had anaemia, the report adds. Various research studies conducted by author addressing the issue of malnutrition of children are as follows

Malnutrition among children in Raichur is a significant issue that has persisted over the years. Despite efforts to address the problem, many children in the district continue to suffer from malnutrition due to various factors such as illiteracy, poor dietary habits, and lack of awareness about nutrition. In the remote villages of Devadurga taluk, for example, children are often underweight and suffer from visible signs of malnutrition. The state government has implemented nutrition programs, providing meals like moong sprouts, sira, rice, dal, eggs, and milk to children in anganwadis. However, the impact of these programs is limited by the community's reluctance to change their traditional food habits. High levels of fluoride and arsenic in drinking water, particularly in areas close to Hutti gold mines, further exacerbate the problem. The government has made some progress in recent years, but there is still a long way to go to ensure that all children in Raichur receive adequate nutrition and care.

a. The prevalence of malnourishment was measured using the nutritional anthropometry mainly it is weight of children. A cluster of four villages namely Askihal (3 Anganwadis), Yaklaspur (2 Anganwadis), Marchad (3 Anganwadis) and Manchalapur (3 Anganwadis) of Raichur taluka covering eleven Anganwadis were selected for the study. The records maintained at Anganwadi were served as source of data, hence it is secondary data. This secondary data was supplemented with the interviews with mothers, ASHA workers and ANMs. The growth charts of children were also reviewed to assess the growth pattern of children. The methodology followed in measuring weights was with the beam balance , where the children were made to sit with minimum clothing and hands free, and then the weight was recorded. The children were then classified using the Gomez's classification and categorized as grade I, II and III. Results revealed that, children in both the age groups i.e., birth to three years and three to six years are equally affected by malnourishment, while the percentage of grade III children was more in 0-3 years age group. The

results from qualitative analysis of interviews with ANMs and ASHA workers revealed that, in spite of interventions, the consanguineous marriages, marriages at < 18 years of age, less spacing between children, delay in supplementation of foods and poor hygienic practices are the major factors leading to malnourishment among children. The results imply that, there is a need to intervene at all the stages of early year's right from conception to 6 years. At the Anganwadi system may be strengthened to cater to needs of 0-6 months children in an integrated manner. The adolescent group may be given knowledge especially in the areas where there is chronic malnutrition (Kammar and Katti, 2017).

b. A study was conducted during 2016-17 to examine the socio-economic factors which determines the under five malnutrition in Raichur district of Karnataka. Thirty anganawadi centres were selected from two talukas of Raichur district. From each anganawadi centre, six children viz. normal, moderate and severely malnourished were selected by following Gomez classification. Mothers of respective children were the respondents for the study who constituted a total size of 180. The results revealed that severely malnourished children belonged to the families where mothers had low education level, and one third of severely malnourished children families were belonged to schedule tribe (33.33%), followed by schedule caste (28.33%). Women in the agricultural labourer category had more number of severely malnourished children (56.66%) followed by house wives (43.33%). About 50 per cent of the severely malnourished children's fathers were agricultural labourers followed by 45 per cent who were agriculturists. Majority of the severely malnourished children families had low income level. It could be concluded from the study that low income level, low education level, lower caste, low social participation of severely malnourished children were the most important socio-economic factors for perpetuation of undernutrition in the rural families. It is inferred that malnutrition is one of the menaces which hinders the overall growth and development of children and it must be curbed by creating an awareness programmes among rural women folk by the involving of Government, NGOs and people's participation (Sneha *et al.*2019).

c. Another study was conducted to assess the impact of vitamin c supplementation in improving the oral health, increased wound healing. An On farm testing on supplementation of Vitamin C rich foods to combat Vitamin C deficiencies among school children was carried out in Raichur taluka during the year 201314. The aim of this testing was to supplement low cost alternative to combat vitamin 'C' deficiency among and children. Forty five children from three Government Primary schools of Raichur taluka were selected purposively for this study. The diagnostic features of vitamin deficiency were gum bleeding, delayed wound healing, infections and split hair. The foods which are rich in vitamin C and dose as recommended by NIN Hyderabad were supplemented. The nutrition supplementation was carried out for three months during January to March 2014.The checklist was administered before and after the supplementation. Qualitative observations on the deficiency symptoms of vitamin C and the perception about health status were also recorded. Though all the foods were accepted by the children, amla was most effective in reducing the symptoms of vitamin c deficiency. But the availability of amla and quantity to be consumed were the constraints faced by the researcher. On the other hand, lime juice and guava were most relished by all the children (Kammar and Vanishree., 2018)..

d. An effort to develop iron rich supplementary food using pearl millet was carried out during 2016. An iron rich health drink as a supplementary food to combat malnutrition. Bajra or pearl millet

which is extensively grown in Raichur district, which is a rich source of iron, Ca, Zn and high level of fat. Novel health drink was prepared using sprouted and dried pearl millet flour, sprouted and dried finger millet powder, malted soya flour, sugar powder and milk powder, and popped and milled amaranth seed powder in different combinations. The pearl millet flour was fortified with other ingredients used in different combinations i.e., 50, 60,70 and 80% respectively along with other ingredients and 100% pearl millet flour was used as control. The effect of germination on nutritional composition in terms of proximate was assessed and sensory evaluation was done for all the fortified samples using 9 point hedonic scale. Sensory evaluation of fortified samples showed that 50 per cent bajra concentration sample was the most accepted sample with respect to all the qualities followed by 60%. Germination enhanced the protein and minerals especially iron content with the reduction in fat (Vanishree *et al* . 2016)

e. A Cross sectional study was conducted to assess the impact of school nutrition garden on the micronutrient intake of children, to combat micronutrient deficiency among children and to increase in ability and interest in incorporating healthier foods. This study was conducted for two years at fourteen selected Higher Primary School and High schools of Raichur and Bagalkot taluka covering both public and private schools during 2015-16 and 2016-17. The nutrients supplied by the cultivated vegetables were computed using Nutritive Value of Indian Foods and were compared with amount of Recommended Dietary Allowance (RDA). The schools were selected on the availability of the place, water and willingness of teachers to maintain the garden with the help of children even during the summer holidays. Children and teachers were introduced to the concept of nutrition garden through orientation to balanced diet and importance of micronutrients. Other extension methods like celebration of World Environment Day (June 5), group discussion were also carried out to popularize the importance of nutrients. The vegetable seed kits containing eight varieties of vegetables developed by Indian Institute of Horticulture Research (IIHR) containing staple vegetables were distributed. These vegetables were grown in Kharif and Rabi season. Along with the seed kit, perennials like curry leaf, drumstick, fig and lemon were also supplied to the schools. Later each class of the children was allotted a specific vegetable for cultivation. Results: After introduction of nutritional garden, the consumption of fresh vegetables increased in the daily diet which contributed towards the good health. It is inferred from these results that school nutrition garden may be made mandatory for high schools with a provision of school garden kit (Kammar *et al*. 2017).

The experiences of families in Raichur highlight the challenges they face in providing proper nutrition for their children. Many families with limited resources struggle to afford nutritious food and healthcare, leading to long-term impacts on their children's physical and intellectual development.

- The results imply that, there is a need to intervene at all the stages of early year's right from conception to 6 years. At the Anganwadi system may be strengthened to cater to needs of 0-6 months children in an integrated manner.
- The adolescents may be empowered with better nutritional knowledge in chronic malnourished area.
- Awareness programmes among rural women folk by the involving of Government, NGOs and people's participation in an integrated manner would be more beneficial.
- Vitamin C rich fruits such as Guava, lime and Amla can be supplemented to overcome anemia with the cooperation from the SHG. It was found that, all the fruits were accepted by the children, amla

was most effective in reducing the symptoms of vitamin c deficiency. The availability and quantity to be consumed were the constraints.

- Composite mix of Bajra (50%) with other flours was the most accepted sample with respect to all the qualities followed by 60%. Germination enhanced the protein and minerals especially iron content with the reduction in fat.
- Shool nutrition garden may be made mandatory for high schools with a provision of school garden kit.

There are already many programmes in operation by state and central govt to cater to the needs. The Government of India launched the Prime Minister's Overarching Scheme for Holistic Nutrition (or POSHAN Abhiyaan) (previously National Nutrition Mission) in March 2018, to concentrate on the entire lifecycle of nutrition, including children aged 0–6 years, school-going children, adolescents, and, finally, Pregnant and Lactating (P&L) women.

Nutrition-Specific Schemes in Karnataka also include (1) supplementary nutrition in Anganwadi centres (2) micronutrient supplementation, (3) Mid-Day Meal (MDM) scheme, (4) food expenses in government-run and government-aided hostels and residential schools, (5) clinical treatment of Severe Acute Malnutrition (SAM), and (6) nutritional counselling.

**Women in Farming: Key Lessons from Raichur's Experience**

The woman is the backbone of the agricultural workforce, but worldwide her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in agriculture, animal husbandry and homes. The research efforts at the ICAR institutes have been tried to relieve her of the drudgery by providing tine and labour saving tools such as improved weeders, winnowers, threshers, paddy transplanters. The interventions were also provided in the areas of nutritional security, dryland and irrigated agricultural technology etc. Vocational trainings are also being conducted to impart skills to undertake different vocations. In extension activities the women is now centre point and activities are being planned keeping her in view. Her enlightenment will change the face of the rural India. Women are involved in various activities related to agricultural and allied enterprises and some of these activities have found to have profound health risks on women. In such situation introduction of agricultural implements has been proved effective in relieving drudgery. ICAR institutes such as National Research Centre for Women in Agriculture(NRCWA), Bhuvaneshwar, Orissa, Bhopal sub center of NRCWA, Central Institute of Agricultural Engineering (CIAE), Bhopal, Central Research Institute for Dryland Agriculture (CRIDA),Hyderabad, Central Rice Research Institute (CRRI), Orissa, Krishi Vigyan Kendras sponsored by Indian Council of Agricultural Research, New Delhi, and through the networking of these institutes with various states have provided various technologies to women in agriculture. These technologies are location and crop specific. But few technologies suitable to Raichur agro-ecological system were assessed and demonstrated in the field presented below

a. In Rural areas, energy is used mainly for cooking and heating purpose. Use of traditional stoves consumes more fuel wood and increase the burden of women in terms of air pollution and drudgery induced kitchen work. In order to reduce indoor air pollution and increase fuel efficiency as well as protect the forest resources and environment, improved stoves (Rice husk stove and enviro fit chulla) were tested in different villages of Raichur and Bellary for three months. Both were found to be having less fuel consumption and time for cooking, burn rate compared to traditional chulla. Among the improved envirofit chulla found to be taken less time and fuel to cook the food and also having

less burning rate. Among agricultural waiste wood husk with wood gives less specific fuel consumption rate and among the improved chullas, envirofit chulla has less specific fuel rate compared to rice husk stove.

b. On farm testing was undertaken to assess the performance of cycle weeder vs traditional method in vegetables. The results showed that, cycle weeder reduces the low back pain and enhances the efficiency in weeding to the tune of 60 percent. The condition for weeding with cycle weeder is that, soils should be moist and weeds should below one month old. But they were expressed that, the availability of weeders at local place is a major problem. They do not have accessibility to these tools. Evaluation of improved weeders in Brinjal : Three models of weeders i.e. local kurpi as farmers practice, hoe weeder and cycle weeder developed by CAE Raichur and CIAE Bhopal were assessed for their performance. Both the improved weeders could prove to be better over the traditional weeder i.e., kurpi. Because of the change in posture adopted while using weeders, Demonstration of cycle weeders in vegetables Another experience in weeding with cycle weeder in vegetables in red soils indicated that, the hard soil is difficult for women to push the weeder. The cycle weeder is not efficient in red soils. Hence, it was revealed that, one tool cannot be used everywhere, there should be focus on development of location specific and crop specific tools for weeding. Demonstration of cycle weeders in chickpea.

c. The performance of five type of weeders viz., cycle weeder, twin wheel hoe weeder, cono weeder, three blade weeder, and a local make designed by the farmers themselves were assessed and compared in direct sown paddy crop. The parameters of assessment included weeding efficiency, plant damage, musculoskeletal disorders, and cost economics. The results showed that, twin wheel hoe weeders in DSR has highest percentage of weeding efficiency, highest performance index, lowest plant damage and is economical to the tune of 60 per cent. Using twin wheel hoe weeder can destroy weeds by completely or partially burying weeds, uprooting and breaking the weed root contact with the soil. The use of weeders at 20–25 days after sowing (DAS) proved to be more beneficial than at later stage. The efficiency of the weeder was found to be 0.3 ha./d/man labour day vs 20–25 women/d/ha. The timely weeding and application of fertilizers is ensured in case of weeding done with twin wheel hoe weeder, while the labour dependency and timely availability of labours is a major problem in manual weeding (Kammar and Katti. 2015).

d. Demonstration of spiral grader in pulses for value addition an drudgery reduction of farm women was another large scale demonstration conducted for four years from 2013-2017 in 23 villages with 925 farmers under integrated Crop Management in Pigeonpea. The rainfed areas of Raichur have tremendous potential for expansion of high-yielding short- and medium-duration Pigeonpea varieties and hybrids. However, the majority of farmers in these rainfed upland ecosystems do not have access to improved Pigeonpea cultivars and management practices including value addition. Value addition to any produce has been a bonus to the farmers. A simple device called spiral grader/separator grading the Pigeonpea with centrifugal force was introduced to the Pigeonpea growing farmers in Raichur district. Farmers used this tool on community sharing basis for value addition to Pigeonpea through grading. With grading alone farmers could realize about 250-300 as an additional income. The results imply that, along with front Line Demonstrations, grader needs to be supplemented as a critical input of ICM (Kammar *et al*.2017)

e. **Demonstration of Paddy straw baler** with an objective to reduce the drudgery of farm women in bringing fodder and drudgery load if straw is collected manually was conducted at Radha Krishna

Camp of Harvi village, Gudadinni camp of Manvi taluka and Kasabe camp, Vijayanagar camp of KVK Raichur during 2014-15 and 2015-16 and 2016-17 for the study. During 2014-15, front line demonstration were conducted at 5 farmers' fields in Radha Krishna Camp on mechanization in paddy, during 2015- 16, demonstrations on paddy baling using the baler available with the department of Agriculture were conducted at the Gudadinni camp of Manvi Taluka for a group of 100 farmers and during 2016-17, FLDs were carried out in Vijayanagar Camp to popularize the baling of paddy straw. Ergonomic assessment was done using Rapid Entire Body Assessment (REBA) scale developed by Hignett and McAtamney (2000) for a group of ten women agricultural labours who constituted control group and were collecting the straw manually. The labour required, time consumed for baling, recovery of the straw with baler and conventional method, extent of adoption of this cost economics were calculated. Same group pre and post tests assessments were compared in adoption of paddy baler. The drudgery scores (REBA) revealed that, manual collection of straw was highly drudgery prone activity as compared to baling. Though mechanical work cannot be compared with the manual work, the computation of drudgery scores for manual collection of straw indicated that, highest drudgery was experienced by women in bending, repeated movement of limbs while collecting the straw. This might lead to musculoskeletal disorders among women. Fluctuations in the pulse rate in doing this activity also indicated physical exertion in carrying out this activity. Regarding utilization of paddy straw about 98 per cent of the straw was used as animal feed and only 2 per cent was used for other purposes like puffed rice units and package material (Kammar *et al.* 2017).

It may be concluded from the above documented experiences that,

- Improved chullas, envirofit chulla may be introduced in areas where women donot have access to LPG stoves. This will improve the health, reduces the time spent in collecting firewood and drudgery of farm women.
- Crop specific and soil specific weeding tools may be introduced through agriculture department/ training of local artisans may be undertaken to design weeders, so that they are made available locally.
- Along with front Line Demonstrations, spiral graders for value addition of pulses which are major crops in Raichur need to be supplemented as a critical input of ICM.
- Popularizing paddy straw baler would reduce the drudgery of women in collecting the fodder for the dairy animals.

**Nurturing Women's Entrepreneurship in Agriculture"**

a. To assess the constraints faced by women in Dairy enterprise a was carried out in Bidar District. This study was conducted in three villages from two talukas of Bidar District by personally interviewing 90 women dairy farmers. Majority of the respondents stated that low milk production from the local breeds was major constraints among production constraints of women dairy farmers and short supply of foot and mouth vaccine was predominant constraints among animal health care and management constraints. Similarly high cost of concentrate was most persisted constraints among economic constraints faced by women dairy farmers , dependence on family member for sale of milk was prime constraints apart from personal constraint, and no prior information about training center was major constraints among organizational and behavioural constraints of women farmers.(Ilkal *et al*.2013)

b. **Entrepreneurship development promotion through millet processing:** Promotion of high yielding variety of foxtail millet HMT-100-1 and Variety-SIA-2644 both released by University of Agricultural Sciences, Dharwad were demonstrated to the farmers in two villages namely Yaklaspur and Turakandoni of Raichur taluka. The results revealed that both these varieties performed better even under moisture stress during the 2013-14 and 2014-15. The seeds thus produced were taken to the millet processing unit of KVK Raichur. Similarly, the performance of HMT-100-1 variety performed better over the local variety, where in farmers realized a net returns of about Rs. 15654/ha over the local check with a B:C ratio of 1:2.69. Thus, the introduction of high yielding varieties was proved to be effective in enhancing the farmers income. Increase in productivity achieved over traditional practices (TP), which used local varieties (LV) by improved agronomic practices (IP) using High Yielding Varieties (HYV) and their quality seeds resulted in either improved availability of nutritious millet grain for home consumption or marketable surplus.

c. **Development of value chains of nutritious millets** The produce of millet was taken to the processing and food engineering laboratory where a millet processing unit sponsored to Krishi Vigyan Kendra Raichur under INSIMP was established. The processing included sorting, dehusking, polishing and sealing and branding the processed produce in the name of KVK along with coordinating groups. The groups were facilitated with sealing machine, printing label and information about the nutritional importance of millets. There was about 60- 65% recovery of millets after processing. Meantime a group by name Nagar Yellamma SHG from Deosugur, Raichur was trained to produce a sweet from millet in the form of pedha, a local name to the sweet which is prepared with the roasted millet flour, ghee and sugar powder. There was demand created for this product. This in turn enhanced their income as well as self confidence. In addition, pearl millet which grown in large area under Lingasugur taluk was also selected for value addition. Wherein, sprouting of pearl millet was tried and malt preparation was carried out. This malt was fortified with malted ragi flour, popped rajkeera, soya flour and condensed milk powder. Developed malt powder utilized in preparation of porridge. Demonstration of this beverage preparation was carried out for Asha workers at government hospital, Mudugal to enhance their knowledge which in turn they can disseminate to many farm women at villages.

d. **Training women members of SHGs on value addition** A series of three trainings were conducted to popularize the value added products from millets. Under the banner of vocational training a six weeks training programme for the upcoming entrepreneurs was organized to demonstrate various products of millets. This training provided them a hands-on-experience in preparing the sweets, and bakery products with the incorporation of millet flour.

e. **Establishing marketing linkages for the processed produce** Marketing of value added products was done either directly by the members of the same SHG, which produced the products or by another SHG which undertook specialized task in packaging and marketing the products. The processed produce were taken for marketing at the Melas, Organic markets at Bengaluru, Sahaja Samriddhi, Bangalore, Other KVKs of UAS, Raichur, hospitals in local area, organic farmers for further marketing. At KVK for the public, who visits KVK, Krishi Bharath, Organic producers mela (Kammar and Vanishree, 2017) .

**Way forward**

Challenges lie in getting the Data on Children Aged 15–18 Years, lack of district level child Indicators, and population level estimates to undertake the nutria-sensitive interventions. Establishing public private partnerships and implementing the effective interventions is essential. The below listed may be adopted to ha

Nutrition sensitive and nutrition specific interventions

| **Nutrition specific** | **Nutrition sensitive** |
|---|---|
| Adolescents health and preconception nutrition | Agriculture and food security **, biofortification of staple crops** |
| Maternal dietary supplementation | Social safety nets |
| Micronutrient supplementation or fortification | Early childhood development |
| Breastfeeding and complementary feeding | Maternal mental health |
| Dietary supplementation for children | Women's empowerment |
| Dietary diversification | Child protection |
| Feeding behaviours and stimulation | Classroom education |
| Treatment for severe acute malnourished children | Water and sanitation |
| Disease prevention and management | Health services |
| Nutrition interventions in emergencies | Family planning services |

**Women empowerment may be achieved through**

1. Educating women is the the basic key.
2. Leadership promotes gender equality
3. Equal opportunity, inclusion and nondiscrimination
4. Health , safety and freedom from violence
5. Education and training
6. Skill enhancement, Enterprise development , supply chain and marketing practices
7. Community leadership and engagement
8. Transparency, measuring and reporting

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