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WOMEN EMPOWERMENT THROUGH GREEN LEAFY VEGETABLES BUSINESS IN VELLORE

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ABSTRACT--*Vellore is a home to varieties of green leafy vegetables. This region is blessed with a range of traditional varieties of nutritious greens. But till today there has been very less documentation of their use and hence their complete benefits are not known leading to its underutilization. Thus there is a need to document the types of green leafy vegetables to analyze their uses and quantification. About sixteen varieties of green leafy vegetables were commonly found in the locality of Vellore which includes Amaranthus caudatus, Solanum nigrum, Alternanthera sessilis, Amaranthus gangeticus, Sesbania grandiflora, Spinacia olerecea, Amaranus dubius, Eclipta alba, Hibiscus cannabis, Portulaca olerecea, Centella asiatica, Moringa oleifera, Coriandum sativum, Murraya koenigii, Mentha arvenis and Trigonella foenum. This business of green leafy vegetable also promotes women empowerment or rehabilitation as this business is mostly done by women. This study helps the reader get an overview of green leaf availability, quantity, nutritive and medicinal properties of leafy green vegetables business in Vellore, South India.*

Keywords-- *Green leafy vegetables, nutrition, medicinal properties, Vellore, Women empowerment.*

I. INTRODUCTION

India has a rich and profoundly shifted cooking of eating regimens spread all through the nation identified with its particular social character, social components, rural and cultural practices and the various accessibility of sustenance[1]. A reasonable diet ought to give the essential supplements like starches, proteins, fats and also give other non-supplement substances which incorporate dietary fiber, minerals and so forth which represents the better wellbeing and way of life. This can be accomplished by adding oats, millets, and green vegetables in the normal eating routine[2]. In this manner these green leafy vegetables are profitable wellsprings of supplements particularly in rustic territories where they typically get short supply of the supplements in their day to day sustenance[3]. So the green leafy vegetables play a vital role in upbringing the health standards of the underdeveloped and developing countries[4]. Since ancient times man has gratified green leafy vegetables as a source of food. World population growth in developing countries has unmet health and nutrition challenge of the masses. Greens are among the most nutritious vegetables of all[5]. They have bounteous measure of supplements, micronutrients, minerals, phytochemicals and enemies of oxidants which are particularly required for the general development and typical wellbeing of the body[6]. In this manner for a parity diet green leafy vegetables are a magnificent decision, what's more, best of all, they are the least expensive vegetable sources available[7]. The motivation behind why people not

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preferring green leafy vegetables for utilization could be due to inadequate information about their nutritive esteem[8]. This green leafy vegetable business is totally engaged by women. As women are of vital importance to rural economics, they are responsible for some 60 to 80% of food production in developing countries. So this investigation will draw out the potential assortments of green leafy vegetables, their uniqueness (restorative and nutritive qualities) in order to augment them for solid life usage.

II. MATERIALS AND METHODS

The study was conducted in Vellore, South India. Two farmers market (Uzhavarsanthai) one in Vellore toll gate and another at Katpadi were visited to collect a wide range of information on the green leafy vegetables. We took the assistance of a person working in the farmers market (Assistant Agricultural Officer). Based on literature review we prepared a list of species to be reviewed. Then we prepared a questionnaire for data collection. The varieties were listed and recorded with local name, it's nutritive and medicinal properties as per information availability. Quantitative information such as number of bundles for each varieties and its availability were recorded. Participation of women in this business were also assessed.

III. RESULTS

The survey of green leafy vegetables' arrival per day and their demand status in the Vellore toll gate farmer's market and the Katpadi farmer's market are given in the table 1 and table 2. These data were collected and compiled from sellers and Assistant Agricultural Officers. The medicinal properties and the nutritive value of the sixteen different varieties available in Vellore are gathered from literature and reported in table 3. The price fluctuations throughout the year were observed and given in table 4. The price fluctuations were also gathered since the harvest of the leafy vegetables are seasonal. Though they are available throughout the year, their quantity differs as per the demand and supply theory, the price also fluctuates. The data are collected and compiled as follows:

This shows that the *Amaranthus caudatus* (Sirukeerai) is the cheapest of all varieties since it is available throughout the year and are being cultivated more. The other varieties are either more seasonal or rarer in Vellore markets like *Murraya koegnii, Trigonella foenum, Centella asiatica* etc., which are of medicinally high valued or added sparsely as flavours in the food like *Coriandum sativum* and *Mentha arvensis*.

Table 1: showing the varieties, quantity, its average price and supply status in Vellore toll gate market.

SL NO.	Varieties	Average number of bundles per day	Average weight per bundle	Total weigh t	Average price	Supply status
1.	*Amaranthus caudatus*	300 ± 65	400 g	120 kg	5 – 12	Most common
2.	*Solanum nigrum*	200 ± 7	565 g	11.3 kg	8 – 20	Demand

3.	*Alternanthera sessilis*	200 ± 41	270 g	54 kg	5 – 8	Common sometimes surplus
4.	*Amaranthus gangeticus*	100 ± 18	360 g	36 kg	5 – 8	Demand
5.	*Sesbania grandiflora*	100 ± 35	500g	50 kg	5 – 10	Sufficient, sometimes surplus
6.	*Spinacea olerecea*	100 ± 21	295 g	29 kg	7 – 20	Sufficient, sometimes demand
7.	*Amaranthus dubius*	355 ± 38	395 g	140 kg	5 – 12	Most common
8.	*Eclipta alba*	89 ± 19	450 g	40 kg	5 – 12	Sufficient, sometimes demand
9.	*Hibiscus cannabis*	129 ± 22	425 g	54 kg	5 – 22	Common sometimes demand
10.	*Portulaca olerecea*	77 ± 10	410 g	31 kg	5 – 12	Sufficient, sometimes demand
11.	*Centella asiatica*	69 ± 14	465 g	32 kg	5 – 19	Sufficient, sometimes demand
12.	*Moringa oleifera*	90 ± 32	485 g	43 kg	5 – 20	Sufficient, sometimes demand
13.	*Coriandum sativum*	600 ± 24	445 g	14 kg	5 - 12	Most common
14.	*Murraya koenigii*	651 ± 56	485 g	31.5 kg	5 – 12	Most common
15.	*Mentha arvenis*	611 ± 36	475 g	29 kg	5 – 12	Most common
16.	*Trigonella foenum*	226 ± 21	485 g	10.9 kg	5 – 22	Most common

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Table 2: Showing the varieties, quantity, its average price and supply status in Katpadi market.

Sl No.	Varieties	Average number of bundles per day	Average Weight per bundle	Total weight	Average price (Rs.)	Supply status
1.	*Amaranthus caudatus*	198 ± 73	300 g	59 kg	5 – 12	Most common
2.	*Solanum nigrum*	200 ±50	321 kg	64 kg	8 – 20	Demand
3.	*Alternanthera sessilis*	150 ± 50	250 g	37 kg	5 – 8	Common sometimes surplus
4.	*Amaranthus gangeticus*	200 ± 13	375 g	75 kg	5 – 8	Demand
5.	*Sesbania grandiflora*	95 ± 19	475 g	45kg	5 – 10	Sufficient, sometimes surplus
6.	*Spinacea olerecea*	175 ± 34	375 g	65 kg	7 – 20	Sufficient, sometimes demand
7.	*Amaranthus dubius*	169 ± 40	365 g	61 kg	5 – 12	Most common
8.	*Eclipta alba*	85 ± 25	425 g	36 kg	5 – 12	Sufficient, sometimes demand
9.	*Hibiscus cannabis*	126 ± 29	415 g	52 kg	5 – 21	Most common
10.	*Portulaca olerecea*	66 ± 19	475 g	31 kg	5 – 12	Sufficient, sometimes demand
11.	*Centella asiatica*	79 ± 20	410 g	32 kg	5 – 20	Sufficient, sometimes demand
12.	*Moringa oleifera*	74 ± 34	391 g	28 kg	5 – 22	Sufficient, sometimes demand
13.	*Coriandum sativum*	410 ±11	415 g	170 kg	5 – 12	Most common
14.	*Murraya koenigii*	500 ±12	365 g	182 kg	5 – 12	Most common
15.	*Mentha arvenis*	443 ±11	458 g	202 kg	5 - 12	Most common
16.	*Trigonella foenum*	225 ± 85	471 g	105 kg	5 - 24	Most common

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Table 3: showing the common name, medicinal properties and nutritive values of the sixteen varieties available in Vellore.

SL.NO	VARIETIES (LOCAL NAME)	MEDICINAL PROPERTIES	NUTRITIVE VALUE (per 100grams)
1	*Amaranthus caudatus* (Sirukeerai)	It gives remedy for some kinds of malignant growth. It has been a best remedy for dementia and other age related issues. It is likewise a solution for cardiovascular ailments and diabetes. It has pain relieving properties. It is helpful for incendiary skin issue. It can fix nasal clog related with colds or sensitivities. It is useful in expanding the waste of sinus discharges and in the opening of hindered eustachian tubes[9].	Carbohydrate (5.1 g), Protein (5.8g), Fat (0.5g), Fiber (9.5g) and Ash (2.2g). The nutrient substance are additionally estimated. They are ascorbic acid (118 mg), riboflavin (0.13mg/l), niacin (0.2 mg/ml), thiamine (0.07 mg/ml). They are Ca (1.8 mg), Mg (3.2 mg), P (3.14 mg), Fe (0.6mg), Na (4.3mg) and K (3.1mg). It is likewise wealthy in flavonoids like gallic acid, caffeic acid, rutin, ferulic acid and quercetin[9].
2	*Solanum nigrum* (Manathakali keerai)	It is exceptionally valuable in restoring rheumatic and gouty joints. It tends to be utilized in the treatment of skin infections and tuberculosis. It can likewise fix dropsy, queasiness and the anxious issue. It is additionally an incredible solution for ulcer, it possesses hepatotoxicity and cancer action[10].	Ash content (10.18%), Crude fat (4.6%), Crude protein (24.9%), Crude fiber (6.81%) and Carbohydrate (53.51%), Ca (17.33mg), P (75.22mg), K (42.89mg), Na(2.71mg), Mn (1.52mg), Zn (0.07mg), Mg (247.59mg), Fe (13.01mg) and S (8.55mg)[11].
3	*Alternanthera sessilis* (Ponnanaganni keerai)	It fixes migraines and mends burns and boils. It can likewise manage snakebites and the related poisonous responses. It tends to be utilized to regard gastrointestinal issues, for example, loose bowels and diarrhea. It is likewise accepted to be a promising restorative solution for wound mending. It additionally has antibacterial, antiallergic and cancer prevention agent properties that are essential to our body[12].	Soluble sugar (3.6g), Starch (3.24g), Protein (0.74g), Amino acids (0.225mg), Vitamin B1 (2.71mg) and Vitamin B2 (12.64mg). It likewise contains different mixes like epigallocatechin, catechin, chlorogenic acid, 4-hydroxybenzoic, apigenin, vanillic acid, ferulic acid, ethyl gallate, and daidzein[12].

4	*Amaranthus gangeticus* (Thandu keerai)	It controls cardiovascular issues and pulse. It can likewise treat different maladies which incorporates dysentery, leucorrhea and looseness of the bowels. It additionally keeps up the respiratory framework and keeps from hack, menorrhagia and bronchitis[13].	Protein (4g), Carbohydrate (6g), Fibre (1g), Ash (1.88g), Fe (16.38mg) ,Ca (185.5mg). Insoluble Dietary Fiber (3.87g) and Soluble Dietary Fiber (0.56g)[14].
5	*Sesbania grandiflora* (Agathi keerai)	The leaves of this plants has cooling impact on the tainted eyes[15].	Protein (8.4g), Fat (1.4g), Fibre (2.2g), Starches (11.8mg), Ca (1,130mg), P (80mg), and Fe (3.9mg)[16].
6	*Spinacea olerecea* (Palak keerai)	They are wealthy in phytochemicals, for example, carotenoids, flavonoids, and phenolic mixes. It likewise has plentiful of cancer prevention agents and nutrients[17]. It can anticipate constant medical issues and different maladies related with aging[17].	Protein (2.9g), Carbohydrate (3.6g), Ca (1036mg), P (513mg), K (5840mg), Na (827mg), Zn (5.5mg), Mg (827mg), Fe (28.4mg), Vitamin A (85500mg), Vitamin B1 (0.9mg), VitaminB2 (1.8mg), Vitamin B5 (0.9mg), Vitamin B6 (1.8mg), Vitamin C (256mg), Vitamin E (18.2mg) and Vitamin K (4400mg)[18].
7	*Amaranthus dubius* (Araikeerai)	It is the best wellspring of nourishment for the youngsters and the lactating mothers. It additionally treats fever since it has drain, iron deficiency and stomach throb[19].	Protein (4.6mg), Fat (0.2g), Fibre (1.8g), Ca (419mg), P (103mg), Fe (8.9mg), carotene (5716ug), thiamine (0.05mg), riboflavin (0.42mg), niacin (1.2mg), and ascorbic acid (64mg) [19].
8	*Eclipta alba* (Karisalanganni keerai)	It is used as antimytotoxic, pain relieving, antihaemorrhagic, anticancer, antimicrobial, hepatpoprotective, antihyperglycemic, antilepsy, antidiabetic, antihepatotoxic, antioxidant and immunomodulatory properties and it is considered as a decent rejuvenator. It	Fat (0.2g), Protein (1.1g), Mineral salts (1.4g), Ca (39mg), P (10mg), Fe (3.9mg). It contains extensive variety of phytochemicals which includes triterpenoids, alkaloids, flavonoids, glycosides, coumestans and polyacetylenes. The leaves contain stigmasterol, a-terthienylmethanol, wedelolactone (1.6%), demethylwedelolactone and

Table 4 : showing the price fluctuations of the sixteen varieties throughout the year.

Sl. No	Varieties/ Month	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Avg Price
1	*Amaranthus caudatus*	5	7	9	11	12	9	8	7	7	6	6	5	7.67
2	*Solanumnigrum*	10	12	14	16	17	14	13	12	12	11	11	10	12.67

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		likewise has wound mending properties. It builds the craving and enhances assimilation. The plant is normally utilized in hair oil and a decent gut controller[20].	demethylwedelolactone-7-glucoside[21].
9	*Hibiscus cannabis* (Pulicha keerai)	It is accounted for to display properties related with anodynes, aperitifsa and aphrodisiacs. It has mitigating and cancer prevention agents' properties. It accomplishes weight gain and furthermore to treat frailty and weariness[22].	Protein (10%), Fiber (72%), Ca (48.654mg), K (106.122mg), Na (5.007mg), Mn (0.493mg), Zn (0.15mg), Mg (50.828mg) and Fe (0.23mg)[23].
10	*Portulaca olerecea* (Paruppu keerai)	It has the properties of cancer prevention, neuroprotective, mitigating, antiulcer, hepatoprotective, nephroprotective, antibacterial, antifungal and antidiabetic properties. It acts a solution for cardiovascular related malady and hypocholestrol infections. It is utilized as beauty care products for wound recuperating reason. It supports insecticidal and wormicidal movement[25].	Carbohydrate (3.4g), protein (1.3g) and Total fat (0.1g). The different Vitamins are the foliates (12ug), niacin (0.480mg), pantothenic acid (0.036mg), pyridoxine (0.073mg), riboflavin (0.112mg), thiamin (0.047mg) and Vitamin C (21mg). The minerals are; Na (45mg), K (494mg), Ca (65mg), Cu (0.113mg), Fe (1.99mg), Mg (68mg), Mn (0.303mg), P (44mg), Se (0.9ug) and Zn (0.17mg)24.
11	*Centella asiatica* (Vallarai keerai)	It has a properties of exceptionally potential in wound mending. It is additionally prescribed for different skin conditions, for example, leprosy, lupus, vericose ulcers, eczema, psoriasis, loose bowels, fever. It is utilized to fix the sickness of genitourinary track of female. It additionally has narcotic properties. It possesses antiepileptic properties. It fills in as a remedy for gastric ulcers. It additionally has radioprotection properties[26].	Protein (2.4%), Sugar content (6.7%) and Fat (0.2%), insoluble fiber (5.4%) and dissolvable fiber (0.49%), P (17mg), Fe (14,9mg) and Na (107.8mg)[27].
12	*Moringa oleifera* (Murangai keerai)	It's utilized as a potential cancer prevention agent, anticancer, calming, against diabetic and antimicrobial specialist. It is utilized to treat lack of healthy sustenance and it additionally incites lactation in nourishing mothers. It treats ailments like asthma, hyperglycemia, heart consume, syphilis, pneumonia, loose bowels, influenza,	Protein (20.51%), Fat (2.63%) and Fibre (19.25%). The minerals are Ca (2007.67mg), P (123.7mg), K (1732mg), Na (129.3mg), Mn (7.68mg), Cu (0.825mg), Zn (2.59mg), Mg (1896.2mg), Fe (26.34mg), Cr (0.42mg) and Se (2.87mg) [28]. It has omega 3 and omega 6 unsaturated fats. It is a rich wellspring of flavonoids,

		cerebral pains, scurvy, skin infections, bronchitis, intestinal sickness[29]. It has the properties to posses against clastogenic and hostile to tumor specialist[30].	ascorbic acid, carotenoids and phenolics[30].
13	*Coriandum sativum* (Kothumalli)	It's leaves have been utilized as antispasmodic, dyspeptic and tidbit and to treat stomach distresses. It is accommodating to treat hacks, chest torments, bladder complaints and as a sexual enhancer[31].	Protein (21.93g), Lipids (4.78g), Carohydrate (52.1g), Total dietary fibre (10.4g). The nutrients, minerals and certain phytochemicals as Ca (1246mg), Fe (42.46mg), Mg (694mg), P (481mg), K (4466mg), Na (211mg), Zn (4.72mg), Vitamin C (566.7mg), thiamin (1.252mg), riboflavin (1.5mg) and niacin (10.707mg)[32].
14	*Murraya koenigii* (Kariveppilai)	It has the properties posseses calming, hostile to amnesic hypocholesterolemic, against helminthic, against bacterial, hostile to diabetic, against contagious, chemoprotective, pain relieving anti-lipid peroxidative, hostile to tumor and against ulcer. It has a capacity to improve great memory. It additionally assumes a noteworthy job in wound mending movement and phagocytic action[33].	Protein (8.38%), Carbohydrate (39.44%), Fats (6.48%), Ash content (15.6%) and Crude fiber (6.3%), alkaloids (1.9mg), saponins (2.5mg), flavonoids (7.43mg), tannins (0.86mg), phenols (4.25mg), glycosides (0.11mg), Vitamin A (6.04mg), Vitamin C (0.04mg), Vitamin E (0.03mg), Vitamin B1 (0.89mg), Vitamin B2 (0.09mg), Vitamin B3 (2.73mg), Ca (19.73mg), Fe (0.16mg), Mg (49.06mg), Na (16,5mg), Zn (0.04mg) and K (0.04mg)[34].
15	*Mentha arvenis* (Pudhina)	It possesses carminative, stimulant, stomachic, sweet-smelling, clean, antispasmodic, pain relieving properties. Different parts of plants possesses antibacterial, antifibrile and antifungal properties. It is viable in treating migraine, rhinitis, hack sore throat and spewing. It goes about as a decent blood chemical. Its sterile and hostile to bacterial property, it is very well	Fat (0.9g), Protein (3.8g), Carbohydrate (15g). The leaves comprises of Organic constituents which incorporates glycosides, proteins, lessening sugars, phenolics/tannins, pitches and steroids/terpenoids. The leaves are made of around 0.2 - 0.8% basic oil, components like antimony, calcium, press, magnesium, potassium and

		utilized to treat swollen gums, mouth ulcers and tooth ache[35].	sodium[36].
16	*Trigonella foenum* (Vendhaya keerai)	The leaves are utilized to treat gynecological disorders and eye infection[37]. The leaves are utilized to treat trachoma and to plan baths for eyes and in instances of abscesses, bubbles, consumes, carbuncles. The leaves are likewise used to treat male pattern baldness and to strengthen nails. The implantation of dried leaves or seedsis taken in pregnancy to prepare the bearing women for birth[38].	Carbohydrate (58g), Fat (6g), Protein (23g). The minerals are Ca (0.395g), P (0.051g), K (0.031g), Na (0.076g), Cu (0.26g), Mg (0.067g) and Fe (16.5g) [37].

3	*Alternantherasessilis*	6	8	10	12	13	10	9	8	7	7	7	6	8.58
4	*Amaranthus gangeticus*	5	7	9	11	12	9	8	7	7	6	6	5	7.67
5	*Sesbaniagrandiflora*	7	9	11	13	14	11	10	9	9	8	8	7	9.67
6	*Spinaceaoleracea*	7	9	11	13	14	11	10	9	9	8	8	7	9.67
7	*Amaranthus dubius*	5	7	9	11	12	9	8	7	7	6	6	5	7.67
8	*Eclipta alba*	6	8	10	12	13	10	9	8	7	7	7	6	8.58
9	*Hibiscus cannabis*	8	10	12	14	15	12	11	10	8	9	9	8	10.5
10	*Portulacaolerecea*	6	8	10	12	13	10	9	8	7	7	7	6	8.58
11	*Centellaasiatica*	11	13	15	17	18	15	14	13	12	12	12	11	13.58
12	*Moringaoleifera*	10	12	14	16	17	14	13	12	12	11	11	10	12.67
13	*Coriandumsativum*	5	7	9	12	15	12	10	9	8	8	7	6	9
14	*Murrayakoeginii*	2	2	3	5	5	4	4	4	3	3	3	2	3.33
15	*Menthaarvenis*	10	12	15	17	20	17	15	14	13	14	12	11	14.15
16	*Trigonellafoenum*	11	13	15	17	18	15	14	13	12	12	12	11	13.58

IV. DISCUSSION

India contributes almost 14% of world's vegetable production on 8.5 million hectares of land under development behind China whose commitment is 48%. It is to be noticed that green leafy vegetables are for the most part kept to southern states of India including Andhra Pradesh, Tamil Nadu and Karnataka. They are likewise found in Gujarat, Bihar, West Bengal and Uttar Pradesh. This study has helped us recognize the greens which are sought after, their restorative properties and different viewpoints identified with its accessibility. The farmers markets contribute greatly to the agricultural sector and thus the major way of revenue for the country. When contrasting the outcomes gathered from both the business sectors, the Vellore toll gate market appears to offer greater amount of leafy greens. Since its area is on the primary piece of the city and numerous other retail shops and other general stores around it could purchase from it. In addition, the people further from the town reaching from Allapuram to Bagayam would feel convenient here and moreover this part of the town is a residential place where population density is higher compared to the Katpadi market. On the other hand, Katpadi market also contributes fairly well.

The production of green leafy vegetables when comparing it and the earlier years, there is a 10-15% increase. This is due to people's health consciousness, also the nutritive and the restorative properties of the green leafy vegetables. The prices for the green leafy vegetables in the farmers market are fixed daily by the government based on the input by farmers. At the point when the input is higher, the vegetable cost comes down. Then again, when the input is low, then the cost shoots up. Women assume an extremely pivotal job in agribusiness everywhere throughout the world. About 70% of the agricultural workers in the world are women. This segment which contributes 25% of the GDP is progressively turning into a female action. The women assume a fundamental job in rural part creation by working underway of yields beginning from sowing, planting, raising until the point that the gathering and post harvest[39]. The agricultural sector in India employs 4/5th of all economically active women of India. About 59.3% of the aggregate working women of Tamil Nadu are found to take an interest in the agricultural segment[40].

The production of these leafy green vegetables for the most part comprises more women specialists beginning from the sowing, weeding till the post-harvest bundling. In these neighborhood markets we reviewed relatively 95% of the leafy green vegetables traders were women and in this manner the expansion of leafy vegetables utilization would in a roundabout way represent the better work opportunities for the women additionally reinforcing the intention of the women empowerment. Likewise there is scope for enhancing the monetary benefits to farmers if they are given proper training and motivation to enlarge their customer base from their respective rural settings to urban environments as well. Customers in urban set up are eager to pay for fresh, nutritious greens provided they have access to the same from the surrounding villages. There is thus a large scope for commercializing these greens lending a helping hand to personal financial growth of the farmer as well as our country on the whole.

Mid day meal scheme (Madhiya Unavu thittam) in Tamil Nadu was presented in Tamil Nadu government schools to get the lunch in all school days all through the entire academic year exempting any holidays. This started with a motto that poverty or hunger should not deprive the children from education. Later the scheme was further enhanced to Nutritious Meal Program (Sathunavu thittam) to promote healthy diet and nourishment among the

children. The menu comprises of rice, dhal, green gram, potatoes alongside egg. The menu did not appear to contain any green leafy vegetables in their routine but the green leafy vegetables are cost proficient and just one bundle or weighing few grams is sufficient for the intake of five people when compared to the egg or other food items. The government could implement such new schemes to get better nourishment among the children and thus to eradicate the malnutrition in an effective manner.

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