



***"DIVERSITY AND FOOD SOVEREIGNTY***

***AND***

***UNCULTIVATED BIODIVERSITY IN SOUTH ASIA"***

**presented through projector for School Children &**

**Teachers**

**Under the programme of**

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***NATIONAL ENVIRONMENT AWARENESS CAMPAIGN (N.E.A.C.)***  
***2007-08***

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**Organised by**

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***Hyderabad-13.***

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*NATIONAL ENVIRONMENT AWARENESS CAMPAIGN 2007-08*

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**"DIVERSITY AND FOOD SOVEREIGNTY  
AND  
UNCULTIVATED BIODIVERSITY IN SOUTH ASIA"**

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**HELD ON 14-03-2008 from 10.30 to 12.30 p.m. AT SHIVA VANI VIDYANIKETAN, AMBERPET, HYDERABAD-13.**

✚ *The title explores the meaning of agriculture and guides the audience into new territory, where food, ecology and culture converge.*

*In the food Systems of **South Asia**, the margin between **Cultivated and uncultivated biodiversity** dissolves through **Women's day- to – day practice of collecting and cooking food, constituting a feminine landscape.***

✚ **Shenchi sak** and many other **greens** are an important part of the food system. The title brings this practice to light, and demonstrates the value of food, production and consumption systems that are localized rather than globalized. Based on extensive field research in India and Bangladesh, with and by farming communities, **the program explains both people-based and evidence-based** respectively on the value of ecological farming, the survival strategies of the very poor and the ongoing contribution of biodiversity to livelihoods.

It also introduces **new concepts such as " the Social landscape" and the ethical relations underlying production systems** relevant to key debates concerning **the cultural politics of food sovereignty, land tenure and the economic of food systems.**

It is a loud and clear message : **" Food sovereignty means the CONSERVATION of BIOLOGICAL DIVERSITY AND REVITALIZATION OF ETHICAL COMMUNITY RELATIONS "**. This subject is an eye – opener. It compels us to rethink the what constitutes food security, Women's knowledge systems, and common pool resources. It makes us see much that we would casually walk past, that we might never taste, that we can not purchase. Flourishing in the interstices of the cultivated and the un-cultivated, the public and private, the field and the forest, or in innumerable leafy greens, fruits, tubers, roots, small fish, grasses, and other forms of food life hidden from our gaze that constitutes the daily diet of numerous villagers across south Asia.

**The program was organized by projector with simple and effective manner to understand the concept of biodiversity.** It tells us some surprising **facts about un-Cultivated foods.** A dietary intake by the authors, of 50 families in 10 Bangladesh villages for instance, found that un-cultivated food provided, an average, 65% of the food weight and all of the fodder and fuel needs of very poor landless households, and 34% of the food weight and 20% of the fuel and fodder needs of better of landed households.

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- In other words, such plants are not just part of the coping strategy that the poor use during seasonal shortages or drought, **they are part of the every day sustenance and keel sources of vitamins, minerals and proteins** not just of the poor but also of the relatively well - off.
- In Medak district alone **79 species** of un-cultivated leafy greens used as food have been documented. Many plants also **have medicinal properties**. The un-cultivated plants leaving as partner plants along side the cultivated ones in habit a landscape **un observed by most researches**. They are neither " wild " (**Un attended**) nor " Domesticated " (**Tamed**), but something in between community managed. This uncultivated Biodiversity provides not just food security but food sovereignty. It gives people control over a basic need. The bio-diverse ecosystems and the local knowledge systems that sustain these food chains are threatened by the spread of "modern" mono-cultural, chemically-driven agriculture and by large-scale displacements of people from their familiar environments.
- Among the undocumented and un-mourned hidden costs of such "development" initiatives is precisely the disappearance of knowledge about food systems based on the everyday use of local environments, especially by women. To keep these systems alive is not just the responsibility of the women and their families, nor just of the provided information communities, **it is also the responsibility of all of us as a trust for the future**.
- As an activists and environmentalists, with a deep respect, for the knowledge embedded in the communities activists work with and live among with a strong commitment to empowering these communities and especially the Women; and a firm belief that **ecological farming systems can be both efficient and sustainable**.
- As we explained i.e. PARTNER PLANTS are numerous beautiful photographs that say what a text alone cannot – photographs of plants, crops and people, especially women and children, **SHOWING US THEIR RELATIONSHIPS** with their environs, the **seeds they preserve**, the foods they **gather and cook**, the **recipes they exchange**, indeed their **entire way of LIFE**.
- We strongly recommend the Teachers not only to those interested in food policy and food security, or in agricultural systems and local knowledge systems, but also to those who are simply curious about other communities and food variety. Further if you can, you should also visit these villages and savour this feast of **DIVERSITY and DELICACY.....** There are several topics involved in BIODIVERSITY AND ITS CONSERVATION..... WE CAN LEARN SOME OF THE TOPICS.....
  - WORSHIP OF THE MANURE HEAP.....
  - BIODIVERSITY AND THE TECHNOLOGY OF COOKING....  
UNDER THIS SUB TOPICS....
  - i. UNCULTIVATED FOODS AND THE TECHNOLOGY OF COOKING.
  - ii. UNCULTIVATED GREENS – THE NUTRITIONAL VALUES...
  - iii. UNCULTIVATED FOODS AND DAILY DIETS...

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**"PENTA POOJA – WORSHIP OF THE MANURE HEAP"**

- ❖ APRIL IS THE MONTH FOR PENTA POOJA, WORSHIP OF THE MANURE HEAP..
- ❖ FARM YARD MANURE IS A CATALYST FOR THE SOIL AND ONE OF THE MOST TREASURED PARTS OF FARMING IN THE DECCAN, COMPARABLE ONLY TO SEEDS.
- ❖ TO begin the farming season the woman of the house lights a lamp, breaks a coconut and sprinkles vermilion and turmeric, the two most reverential tools of worship, before the manure heap... She does a aarti, turning a lighted lamp in a circular motion in front of the manure heap. Exactly as she would worship the most important gods in the Hindu pantheon.

**ERUVAA!! ADOKKA LAXMI**

(MANURE...That is the goddess of Wealth!) is a popular saying among the Deccan farmers. But most of the time this is **interpreted in scientific circles as sentimental statement of ignorant farmers.**

A survey of 79 houses in the village of Pastapur in the Medak District shines a different light on this supposedly ignorant statement.

- ❖ The findings show that the large farmers used an estimated **5,500 tons of farmyard manure on their fields, of which only about 2,425 tones came from their own manure heaps.**

The remaining 3,075 tons was purchased from other villagers who had either no land and therefore no use for the manure they had generated, or excess manure that they could not use on their own lands.

The total value of the manure used or purchased by the larger farmers was an estimated Rs.425,000/-. Rental of cart time totaling an estimated Rs.125,000/- and around 8,000 person days of paid wages amounting to an estimated Rs.240,000/- was also employed to spread the manure on the fields.

The smaller farmers and landless households produced an additional 3,895 tons of farmyard manure, with a monetary value of Rs.310,000/-.

The tasks of applying this manure to the fields of the smaller farmers generated demand for about 5,250 person days of wage labor, with a monetary value of an estimated Rs.160,000/-.

- ❖ If we calculated in terms of the financial and in-kind transactions involving farmyard manure amounted to an estimated Rs.12,60,000/-, equivalent to some \$30,000 USD or 84% of the entire annual budget of the Pastapur village Council.

- ❖ DO YOU THINK ... IT IS NO WONDER THAT **FARMERS EXCLAIM: ERUVAA! ADOKKA LAXMI !....**

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**“UN CULTIVATED FOODS AND TECHNOLOGY OF COOKING  
IN PERCEPTION OF BANGLADESH”**

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The collection of uncultivated plants is only of what farming people do to turn them into food. Collection merges seamlessly with the Science and Technology of Cooking. While uncultivated plants are available in various spaces and at various times of the year, **the cook must know what she wants to collect and why.** This knowledge determines the collection, and alters the dividing line between the edible and the non-edible.

To the Rural Women of Bangladesh **“SHAK” are not simply leafy greens** but rather any uncultivated plant available in and around the household that can be **rendered edible by the technology of cooking.**

They are **“SHAK”** if one knows how to cook them. The link between **plant genetic resources** and the local cuisine system is direct, reflecting not only a particular world view or epistemology of food but also the day to day **practice of local Science and Technology.**

The relationship between the SHAK, the surrounding environment and the cooking fire is also direct and very immediate, revealing a process of **food production, circulation and consumption** distinct from that of other food stuffs such as **“SHABJI”, the Bengali word for vegetable.**

SHAK, unlike SHABJI, are not normally purchased in the market. Typically, they are collected while the cook prepares to light the CHULA, a conical clay stand used to concentrate the fire on the cooking pot. **Girls are sent with a bamboo basket** or tray to collect leafy greens indicated by the cook, whether it be a mother or grandmother.

The boys are also helpful in the collection of leafy greens, roots and **tubers from the water bodies during the rainy season** and typically combine this activity with the collection of small fish using a small aluminum pot and small fishing net.

Within 15 to 30 minutes the children gather the leaves and bring them home where they are sorted, checked for spider eggs and other insects and washed until the water is clean of dirt. They are then drained on a bamboo tray or kept in a bowl, depending on whether the water on the leaves is to be used during cooking.

They are cooked as soon as they are collected, unless they are left overnight on the roof as a part of the cooking process for the next day's morning meal. When they do start appearing in the market, as some have in recent years, they lose the grace of being called **SHAK and taken on a new meaning as SHABJI – a vegetable mediated by the market.**

The collection and analysis of recipes and the cooking styles of Women in **TANGALI** shed light on the **relationship** of uncultivated plants to fire and the cooking pot, as well as other **cooking parameters.**

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✚ **BHAJI** is a common preparation, made from **chopped leafy greens**, onion and garlic fried in mustard oil. A bamboo stick is used to stir the ingredients. Red or Green chilies are added, to taste, alternating stirring to distribute the heat and covering with a lid.

The determining parameter in the definition of BHAJI is the **absence of turmeric**, a spice used in Bangladesh to **conserve cooked food**. **Turmeric is an organic biocide**, a useful spice in a tropical and humid environment as it slows down spice in a tropical and humid environment as it slows down the fermentation process and the growth of harmful bacteria. **BHAJI**, by virtue of the absence of turmeric, **refers to a preparation that is consumed immediately after cooking**.

✚ A **BHORTA** is a **mashed** preparation of **leafy greens**, mixed with onion, garlic, green chilies and (optionally) mustard oil. The process of preparation is derived from the cooking of other dishes rather than the BHORTA itself. The ingredients may be steamed lightly along with rice or simply mashed by hand. A BHORTA is only partially cooked at most and the final preparation does not contain added water. In some areas of Bangladesh **BHORTA is also known as CHANA or BOTA**. Because of this particular cooking process the part of the plant collected for a BHORTA must be tender and very young. **Not all leafy greens are good for BHORTA**.

✚ **CHARCHARI** is a **dry dish of greens** cooked over a very hot fire with mustard oil, small fish and spices such as coriander or chili paste. The dish is ready when the combination makes a distinctive **"CHAR CHAR"** sound indicating that the water has dried up and the green, fish and oil are properly mixed.

CHARCHARI is a **delicacy in the Bengali cuisine** system similar to the **"LAHORE KARAI"** – a particular way of **cooking meat in Lahore, Pakistan**. The fish species most suitable for Charchari are collected from **open water** (as opposed to ponds) and are susceptible to rapid decomposition.

Women know to use the greens **PIPUL SHAK** (Piper longum) and **GONAIL SHAK** (Paederia foetida) in this dish as they go very well with partially fermented or rotten fish. **Plants that are cooked with rotten fish have a very significant role in rural diets and are an important source of NUTRITION**.

✚ **GHONTO** is a dish of **cultivated plants** such as potatoes and eggplant mixed with uncultivated shak. It cannot be made up of cultivated or uncultivated plants alone as it is by definition the mixing of unrelated plants or unrelated parts of plants in the medium water.

The use of spices in GHONTO is minimal, focusing instead on using water to extract and make available nutritional and medical properties. The mixing of unrelated items is needed to manage tastes in the dish as many valuable plants or parts of plants are very bitter or tasteless when cooked alone.

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**GHONTO** is consequently a kind of cooking method used for plants that are otherwise not so edible but can add to the culinary repertoire. A dish may be **cooked as a single green** or as a mixture in very precise combinations of species and in association with particular cooking styles. These change with the seasons. For example **KATA NOTEY SHAK** ( *Amaranthus spinosus* ) is available all round the year, even in the summer, but is **not consumed until the winter** because that is when it is tastier.

✚ **GIMA SHAK** (*Hydrocotyle rotundifolia*) is eaten during the dry month of APRIL even though it is relatively scarce at that time because in the dry season it has a particular medicinal value.

✚ **KOLMI SHAK** ( *Ipomoea aquatica*), a green collected from water bodies, is available year round but is prepared differently according to the season. When **eaten in the rainy season it considered good for lactating mothers and very effective against stomach problems.** It is typically cut into small pieces, washed and cooked as BHAJI with salt, chili, garlic and onion to be served with warm rice. It also boiled with the rice and separated to make a BHORTA ( mashed preparation) with onion, chili, salt and mustard oil. This style **saves cooking time** and is handy for making an early breakfast for the men leaving for the fields. When more time is available, it is fried in a pot with chili, onion, turmeric, salt and garlic and then small fish are added with more ground spices such as coriander. Water is added and the dish is boiled for sometime until a JHOLI or soupy dish is ready.

During the drier winter season **DONDO KOLISH** (*Leucus aspera*) is cooked in a mixture with other greens. The shak derived by plucking leaves from cultivated crops such as mustard, pulses, and potato are also cooked in the winter as mixed Bhaji. In the mixing of greens, typically one species is used as the main item and others are added for taste or other properties.

✚ **SHENCHI SHAK** will be **mixed with** smaller quantities of **KOLMI SHAK** (*Ipomoea aquatica* ) and **KALAI SHAK** ( *Derris trifoliata* ) and mixed together with onion and green chili, Sweet potato, cultivated for its tuber, produces derived green cooked and **BOTUA** (*Chenopodium album*), **SHANTI, DONDO KOLOSH** ( *Leucus aspera*) and several other leafy greens. Our discussions with Women found consistent combinations of green across households, patterns of two, three, four and five species. Women know very well the tastes and medicinal qualities of different SHAKS after mixing and individually. The main criteria for combining particular species is based on a local classificatory system which divides leafy greens into sweet, sour and bitter types. Bitter types are usually of medicinal value while the sweet and sour types have particular food values. Mixing up these types is based on specific knowledge of the properties of each plant, their combined effect and the particular circumstances of the household. Ideally, **the bitter GILMA SHAK** is not mixed with a sweet SHAK because mixing reduces its medicinal qualities. It is eaten in late March and early April to strengthen the body against diseases of the coming monsoon. But it may be fixed with vegetables such as BRINJAL or EGGS so that children can tolerate the bitter taste and yet **benefit from its medicinal qualities.**

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There are other SHAKS such as **JUTE LEAVES** or **KANAI SHAK** which become sticky after cooking with water and are therefore not mixed with other types.

✚ **NETAPETA** is a sweet tasting SHAK cooked with **HENCHI** ( a bitter SHAK) and **AMARANTHUS** ( a sweet SHAK ), sometimes, one SHAK is taken as the major SHAK, and then combined in lesser proportion with other SHAKS of different tastes.

✚ SHAK have **definite eating times**, In TANGAIL, SHAK are usually **eaten two times** a day, either in the morning and afternoon or in the afternoon and evening. The **afternoon meal** contains a larger amount and **great diversity** of SHAK compared to the other two times of day. This is partly because larger amounts of SHAK can be collected during the day while working in fields or visiting common lands, and they are freshest for the afternoon meal. They are also digested more easily when eaten during the day, as opposed to evening time.

The morning SHAKs are usually collected from immediately around the homestead, typically in a matter of minutes before the morning meal is prepared. A survey of households in TANGALI generated a list of **17 SHAKS consumed mainly in the morning, 42 in the afternoon and 19 in the evening.**

In general, the poorer families consume a greater diversity of leafy greens, usually prepared as BHORTA (mashed preparation) and GHONTO (Water preparation). They tended to economize by not using oil in their preparations and few spices other than except chili.

BY CONTRAST, the **better-off families** usually cook their greens as BHAJI or CHARCHARI, preparations which **require more spices and oil**. They also consume a **lesser diversity** of spices.

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### **"UN-CULTIVATED GREENS – THE NUTRITIONAL VALUES"**

It is common knowledge that leafy greens are beneficial to **people's health**. The broader context of dietary diversity and its relationship to human health is also apparent but widely **IGNORED**.

The shift from a dietary pattern based on diverse sources of nutrition including fruit, vegetables, animal protein and grains to a diet high in saturated fat, sugar and refined foods and low in fiber is virtually complete in North America and Europe and is occurring very rapidly in middle income countries such as Mexico, South Africa and Egypt. It is also widespread and increasing in the Urban populations of even the poorest countries in the world.

WHAT IS TROUBLING is that the **"NUTRITION TRANSITION"** is directly related to rapid increases in the incidence of nutrition-related non-communicable diseases such as diabetes, cardiovascular disease and certain kinds of cancer, diseases that are now the main causes of disability and death globally.

Research suggests that this is a looming public health crisis of enormous proportions. Only a few countries such as South Korea have been relatively successful at directing the nutrition transition and avoiding the concomitant increases in nutrition related non-communicable diseases by promoting traditional low-fat, high-vegetable local cuisines that include many so-called **"WILD GREENS"**.

When the **farmer women** of Medak District **talk about** the food and nutritional qualities of uncultivated greens what emerges is a regular rhythm of consensus. The expressions to describe them range from utilitarian (It helps us cope with the Poverty) to unabashed admiration (**Doggali greens are tastier than chicken eggs**).

**They are also unanimous in the view that uncultivated greens bring "Plentiffulness" (Barkat) to their meals.**

This is particularly true when the greens are cooked with lentils, cowpeas, mung beans or other pulses as the total volume of the dish increases, making it possible for the entire family to eat a complete meal with few cultivated ingredients.

Other dishes using uncultivated plants are curries (with or without other Vegetables) and soups made from pigeon pea or horse-gram.

These are typically combined with **SORGHUM bread (Chapatti)** or one of several different types of millet grains, along with a hot sauce made with hibiscus pods or a condiment made from ground sesame seeds.

Thus, while the cultivated landscape provides carbohydrates and proteins in the form of grains, pulses and oil seeds, the uncultivated landscape completes the diet with the micro-nutrients contained in the greens.

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Some 79 different uncultivated leafy green vegetables are used by the farmer Women of Medak as Food. **Many are extremely rich in micro-nutrients important to human health.**

For example :

NALLAKASHE (SOLANUM NIGRUM)	VITAMIN-A	(23417 IU)
JANNACHEMCHALI (Coculus hirsutus)	CALCIUM / ZINC / MAGNESIUM / MANGANESE	(3237 MG / 100G) (2.7 MG/100G) (520 MG/ 100GM) (21.3 MG/100GM)
YELAKACHEVULA KOORA (MERREMIAL EMARGINTA)	COPPER / PHOSPHOROUS	0.9 MG /100GM 166 MG/100G

Many of the **greens are rich in Iron**, including **PULLAKOORA** (Oxalis Corniculata) 139 mg/ 100g. **JONNACHEMCHALI** (Coculus hirsutus) 111.3 mg/ 100g and **THUMMIKURA** (Leucas aspera) 81.6 mg / 100g.

These leafy **greens**, along **with the pulses and grains** of the Deccan, **are helpful** in the **PREVENTION OF IRON DEFICIENCY ANEMIA (IDA)**, a condition especially harmful for pregnant women and their babies.

A Recent study found that the Nutritional values of many of the leafy greens in farmer's fields are higher in the relatively infertile red soils characteristic of the mixed farming systems of the poor compared to the more fertile black soils farmed by better-off groups.

Assessment of vital **C and beta-carotene content of leafy greens** found that half of the species **have higher values** when grown in red soils compared to black soils.

This is striking observation of genotype by environment interaction, and a direct challenge to assumptions regarding the inherent inferiority of the red soils of the poor. While laboratory analysis of the leafy greens establishes beyond doubt their nutritional values, other qualities of the leafy greens are identified by local people using a different set of parameters.

**The feeling of strength in the body provided by consuming greens is associated by villagers with the process of blood formation, and is probably a good proxy for sources of Iron. Taste is also considered.**

**PUNDI**, the hibiscus plant, has been in the farming environment of Andhra Pradesh for centuries and is considered by many to be the tastiest of leafy greens. Food for special diets is a parameter through which women classify the uncultivated greens used as convalescent foods for children, lactating mothers and adults who are recuperating from an illness.

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The plants ranked highly as diet food also score highly on the parameter of providing strength to the body and taste.

BY CONTRAST, foods that score high on medical value, another parameter, are not perceived as capable of giving strength to the body and hence are of little use to convalescing people.

#### **MEDICAL – MEDICINAL – CONTROL DISEASES :**

They are, however, good for treating common ailments. **Some greens are used to prepare an expectorant for children suffering from a cough and cold while others are used to help in the relief of piles.**

These are **greens to treat night blindness, rheumatism and bone pains. Decoction of a particular green is considered an excellent tonic for urinary problems while another is used to relieve menstrual pains and dysentery.**

Each of preparation refers to the amount of labour involved in the collection, separation, cutting and cooking of uncultivated greens. A green such as **PULCHINTA** is given a low score on this parameter because the small, tender leaves require painstaking separation leaf by leaf from the fibrous stem. Storability is also considered, and the few greens available with this quality are highly valued.

**ATTHELI**, for example, is dried in the sun and stored for use later in the year. As many of the poor do not have land around their homes and must walk some distance to an agricultural field or village commons to collect uncultivated greens, having stored greens on hand is a TREASURE.

Market value was also recognized as a relevant parameter but one which applies only to few of the leafy green vegetables. A handful of species (for example **KOTHIMIR AND PUDINA**) are used in virtually all curries to enhance the taste of the dish. They are in high demand and consequently have good value in the market. Most other greens do not currently have a monetary value because they are abundant and readily available. **SELF-GENERATION is a quality for which uncultivated foods have to stand the test as they are not expressly planted by human beings.**

Half of the species ranked were given in a very high score for their ability to regenerate themselves because they germinated easily and are accessible either in dry lands or irrigated areas. Some greens were given low scores on this parameter because they require special care and attention at different stages of growth.

**BARKAT** is a unique concept which expresses whether or not a food cooked with another adds bulk to the diet. On this parameter many leafy greens rank highly. NARSAMMA from KALMELA Village brought this concept alive with the observation that **"A WHOLE FAMILY CAN CONTINUE TO LIVE ON A GREEN LIKE PUNDI"**.

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**"UN-CULTIVATED FOODS AND DAILY DIETS"**

Understanding the dynamic relationship of biodiversity and local food systems allows us to question the inevitability and desirability of a transition to diets based entirely on CULTIVATED DIVERSITY.

Increases in the production of so called "**stable crops**" can only be considered an increase in food production if they really make a net contribution to the availability of food at the household level. This is an empirical question and needs to be grounded in the context of **specific cultures and ecosystems**.

The role of **uncultivated foods** in addressing the regular food and nutritional needs of rural communities was assessed for Tangali, Bangladesh through a **dietary intake survey** in 10 villages. Some 50 families from a stratified random sample of 2,285 families were interviewed, representing four class categories defined in the National Census by farm size: very poor (20% of the total population), poor (44%), middle (32%), and relatively well-off farmers (4% of the total population).

Data collection was undertaken in late October and early November, a time of the year when food, including rice and cultivated leafy vegetables, is relatively abundant. The study period was a normal winter season without significant stress conditions due to floods, drought or other calamities. Consequently, any observed use of uncultivated foods such as leafy vegetables, during this period was probably due to dietary choice, not because families had no other option. Nevertheless, limited access to other foods is a factor in individual cases, especially among the very poor.

To collect the data two UBINIG researchers stayed in the study villages and took direct observations of dietary intake from early morning until the evening meal had been completed. In each household food consumption was monitored for three days and the ingredients used in each meal weighed with a scale before and after cooking.

Uncooked items were weighed after they were washed, cleaned and drained of all water, as is normally done in cooking. The cooked food was weighed as it is usually served; in the case of curry it was weighed with the gravy (jhol).

The **uncooked ingredients were divided into two categories**: Cultivated ingredients (mainly rice, wheat, pulses, meat, large purchased fish, eggs and cultivated vegetables ) and Uncultivated ingredients (mainly leafy greens and tubers, as well as small collected fish). This division was possible because the items are easily identified and often cooked separately. The observations for 3 days of meals were totaled and the proportion of uncultivated foods in the diet was calculated based on the weight of uncooked ingredients.

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**THE VERY POOR :** Sufia Begum, a woman of 33 years in the village of Maushakathalia, has **no cultivable land and no economically active men** in the household but has a small homestead she shares with a daughter (14 years) and a son (8 years). This profile is typical of families in this economic category. Only one very poor household among those surveyed had a cow, although many owned chickens or goats. Foods consumption estimates for the study periods indicate that families in this category rely on uncultivated foods to supply a high percentage of their food by weight, ranging from a low of 38% to a high of 89%, and averaging some 65% across the families surveyed. They also met virtually all of their fuel and fodder needs from uncultivated sources. This category of family also sells or exchanges uncultivated foods for other food and goods they need.

**THE POOR :** Hazera begum ( 52 years of age) is somewhat better off than Sufia because she has both homestead land and a small amount of cultivable land (less than 1 acre). She also owns a cow. She is a widow and has two small grandchildren living with her. This level and type of assets is typical of the poor families surveyed. On average, they derive about 55 % of their food by weight from uncultivated sources. Discussions with them indicate that 70 % to 80 % of their fuel and fodder needs are also met from uncultivated sources.

**MIDDLE FAMILIES :** Saleha Begum has about 2 acres of cultivable land and a small homestead, the land assets of middle families. She owns two cows. The household is comprised of herself, her husband, a grown son and a daughter-in-law. On average, families in this group rely on uncultivated food sources for about 52% of their food by weight. Discussions with these families indicated that uncultivated sources provide about 30% of their fuel and fodder needs. While the land assets of families in this category would seem to provide them with economic options, uncultivated sources are still very important to their daily diet.

**BETTER-OFF FAMILIES :** Abdul Jalil, his wife, two sons and a daughter have a little more than 3 acres of cultivable land an ample homestead as well as several cows and poultry. Despite these assets the family still relies on uncultivated food sources for 43% of their food, with an average for this family category of approximately 34%. This is a remarkably high percentage for a food source virtually absent from the format marketplace. This type of family also draws on uncultivated sources for about 20% of their fuel and folder needs.

They survey indicates that for all social classes in the villages uncultivated food sources make up a large part of the daily diet during a time of the year when cultivated food sources are also relatively abundant. Far from being a minor supplement or simply a crisis food, the leafy greens, tubers and small fish collected by people from the lands and water bodies of their communities are a vital part of their daily diet. While this was not surprising in the case of the very poor, what we had not anticipated prior to the study was that even middle and better-off families draw significantly on Uncultivated sources for their food, feed and fuel needs.

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**Where BIODIVERSITY based ecological farming practices are dominant these food sources are available and systematically incorporated into the daily diet. This suggests that a shift to ecological farming in other regions would enhance ACCESS TO UNCULTIVATED FOODS, ENSURING A LARGE AND STRATEGIC PORTION OF THE FOOD NEEDS OF COMMUNITY MEMBERS, REGARDLESS OF SOCIAL CLASS.**

**ABSTRACT OF THE PROGRAMME :**

ORGANIZED BY : PANCHAVATI RURAL DEVELOPMENT SOCIETY, 2-2-682  
Pochammabasti, Amberpet, Hyderabad-50 0013.

HELD AT : SHIVA VANI VIDYANIKETAN, Near Gandhi Night School,  
Amberpet, Hyderabad-13.

PARTICIPANTS : CHILDREN 6<sup>TH</sup> TO 9<sup>TH</sup> CLASS AND TEACHERS consisting of  
**150 and 10 respectively.**

TIME & DATE : 10.30 A.M. TO 12.30 P.M. ON 14-03-2008.

Chief guest : Sri Balwant Reddy, Principal of Shiva Vani

SPEAKER : Sri A. Muralidhar.

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**RECEIPTS AND PAYMENTS ACCOUNT FOR THE PERIOD  
FROM 9-1-2008 TO 31-3-2008**

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NEAC RECEIPTS	AMOUNT Rs. Ps.	NEAC PAYMENTS	AMOUNT Rs. Ps.
<b>To Receipts from Ministry of Environ- ment &amp; Forests, New Delhi through Deccan Development Society (incl. receivable Rs.1600/-)</b>	<b>8,000=00</b>	<b>By Resource material</b>	<b>2750=00</b>
		<b>By Travel &amp; Conveyance</b>	<b>1,275=00</b>
		<b>By Meeting Expenses</b>	<b>2,650=00</b>
		<b>By Xerox &amp; Stationery</b>	<b>225=00</b>
<b>To P.R.D.S. contribution</b>	<b>1000=00</b>	<b>By Action component - Tree plantation</b>	<b>2,100=00</b>
<b>TOTAL</b>	<b>9,000=00</b>	<b>TOTAL</b>	<b>9,000=00</b>

**NOTE :**

- 1. We purchased 50 Nos. medicinal plants i.e. Neem and Jatropa plants worth Rs.2100/- including transportation charges. Plants are planted in Shankerpally village in our project area.**
2. Certified and confirmed that the above expenses has incurred for preparation Resource material and projector Hire charges for one meeting in Amberpet and in Shankerpally village in R.R. District.

Yours faithfully  
For Panchavati Rural Development Society

A. MURALIDHAR  
Secretary

Place : Hyderabad-13.  
Dated : 31-3-2008