Ethnobotanical Studies of some Useful Shrubs and Trees of District Buner, NWFP, Pakistan

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Abstract
The present study was carried out to assess and document ethnobotanical knowledge of shrubs and trees of District Buner as the area has diverse flora and high ethnobotanical potential. It was found that 94 different plant species are used for medicinal, timber, fuel wood, fodder, ornamental, agricultural tools, Thatching, fencing, naming (folk lore) and fruit yielding purposes.

Bulk of plant species show multiple uses like *Juglans regia* wood is used for making furniture, gun woody parts, carving and as fuel. Root bark (Dandasa) is used for cleaning and sparkling teeth. Leaves are used by womenfolk for coloring lips (make-up). Nuts are edible and are traded to other parts of the country. The fruits are aphrodisiac and also used as dye. Decoction of leaves is given in eczema and intestinal worms. Used in naming i.e. Ghuz.

Several species like *Abies pindrow*, *Berberis lycium*, *Juglans regia*, *Skimmia laureola*, *Daphne oleoides* and *Pistacea integrima* are under severe pressure from local population and require protection and conservation strategies.

Key words: Ethnobotany; Medicinal shrubs; Medicinal trees; Buner.

Introduction to the Area
Buner is located in the north of NWFP, bordering upper Swat on the north, Malakand Agency on the west, Mardan District on the south and Hazara Division on the east. Buner is a Sanskrit word which means forest, which seems to be true because Buner is rich in forestry.

Buner with an area of 1760 square kilometers lies between 34°-9' and 34°-43' N latitudes and 72°-10' and 72°-47' E longitudes. The climate of Buner district is moderate. During summer season, the climate is hot in the lower Buner (Ambela) but pleasant in the upper parts (Gadezai and Gokand). The summer season is short and mild. During this season the temperature seldom rises above 40° C. The winter season is very cool and extends from November to February. Rains and snow occur during this season. People migrate from upper parts due to severe cold and remain in the lower part of the district till the melting of snow.

Ethnobotany in Pakistan
Ethnobotany includes all sorts of relationships between people and plants. The definition of ethnobotany can be sum up in four words i.e. People, Plants, Interactions, Uses. The term ethnobotany was for the first time used by John Harshberger in 1896. In the last 100 years, the science of ethnobotany has progressed and the trend is shifting from mere documentation process to a more practical one which emphasize on conservation and sustainable use of plant resources.

In Pakistan, ethnobotany is introduced quite recently. Only a few projects have been launched for documentation as well as sustainable use of plant resources despite of the fact that Pakistan presents very rich and diverse flora due to her diverse climatic, soil conditions and multiple ecological regions. Pakistan has four phytogeographical regions, the uniregionals, consisting of Irano-Turanian (46%), Sino-Himalayan (10%), Saharo-Sindian (9.5%), and Indian element (4.5%). The country has about 6,000 species of wild plants of which about 400 to 600 are considered to be

medicinally important.

The northern areas of Pakistan with unique biodiversity due to the presence of Himalayas,Karakorums and Hindu-kush mountain ranges are under tremendous pressure from locals because of illicit cutting of valuable plants, poor collection and storage methods of medicinal plants, smuggling of timber wood, over grazing, corrupt forest officials, illiterate population with no sense or lust for conservation and above all passive and non practical policies of Government as well as NGO,s working in the area.

Materials and Methods

The project area was visited several times for collection of data during the year 2001. The plants were collected, pressed and later on identified. Questionnaires were adopted for documenting ethnobotanical knowledge of the area. The data obtained was cross checked with available literature.

Results

The ethnobotany of 94 species of shrubs and trees were documented during the present investigation. The results follow:

Botanical Name: *Abies pindrow* Royle
Family: Pinaceae
Local Name: Achar
Habit: Tree
Part Used: Trunk, Branches
Folk use: The plant is used for timber, making furniture, beams for bridges and roofs and fuel wood in the area.

Botanical Name: *Acacia catechu* L.
Family: Mimosaceae
Local Name: Zunda
Habit: Tree
Part Used: Wood, Leaves
Folk use: Wood is used locally for making agricultural tools and fuel wood. The leaves are used as fodder.

Botanical Name: *Acacia modesta* Wall.
Family: Mimosaceae
Local Name: Phalosa
Habit: Tree
Part Used: Leaves, Gums
Folk Use: Leaves are used as fodder. Gum is tonic, stimulant. Kand (A mixture of Gum+ Desi ghee+ Poppy seeds+ Almond) is fed to women after child birth.

Botanical Name: *Acacia nilotica* (L) Delile
Family: Mimosaceae
Local Name: Kikhar
Habit: Tree
Part Used: Wood, Leaves, Gum
Folk Use: The wood is hard and durable and used for house construction, agricultural tools and asfuel wood. Leaves are used as fodder for goats while Gum is used as tonic, also for curing diarrhea, dysentery and diabetes.

Botanical Name: *Acer cappadocicum* Gled.
Family: Aceraceae
Local Name: Chinaranga
Habit: Tree
Part Used: Wood

Folk use: The plant is used for fuel wood and ornamental purposes.

Botanical Name: *Aesculus indica* (Wall. ex. Cambl.) Hk.f.
Family: Hippocastinaceae
Local Name: Jawaz
Habit: Tree
Part Used: wood, Leaves and Fruit
Folk Use: Wood is used as timber, furniture, agricultural tools and house hold utensils. Leaves as fodder for goats while fruits serve for treating colic in horses.

Botanical Name: *Ailanthus altissima* (Mill) Swingle
Family: Simarubaceae
Local Name: Bakhyana
Habit: Tree
Part Used: Wood, Leaves, Bark, Gum resin
Folk Use: wood is used for construction, low class furniture and as a fuel wood. Leaves are used as fodder for goats and sheep. Bark is anthelminthic. Bark juice is mixed for curing dysentery and diarrhea. Gum resin mixed with milk is valuable remedy for dysentery.

Botanical Name: *Alnus nitida* (Spach.) Endl.
Family: Betulaceae
Local Name: Geiray
Habit: Tree
Part Used: Wood
Folk use: wood is used for fuel wood purposes and agricultural tools. The plant is good soil binder and prevent soil erosion.

Botanical Name: *Bauhinia variegata* L.
Family: Caesalpinaceae
Local Name: Kulyar
Habit: Tree
Part Used: Wood, Bark, Flowering buds
Folk Use: Wood is used as timber and fuel wood. Bark is tonic, anthelminthic, astringent. Also useful in skin disease and leprosy. Flowering buds are used as vegetable.

Botanical Name: *Berberis lycium* Royle
Family: Berberidaceae
Local Name: Ziar Largay
Habit: Shrub
Part Used: Leaves, Fruits, Bark
Folk Use: Leaves decoction is useful in dysentery and sore throat. Fruits are edible. Root and stem bark is tonic, cathartic and diuretic. Decoction is useful in dyspepsia, jaundice and other liver disorders. Also used as hedge plant.

Botanical Name: a. *Betula jaequimontii* Spach.
b. *Betula utilis* D. Don
Family: Betulaceae
Local Name: Barg
Habit: Tree
Part Used: wood and branches
Folk use: Wood is used for making agricultural tools, utensils and fences. Branches are used as fuel wood.

Botanical Name: *Calotropis procera* (Wild) R. Br.
Family: Asclepiadaceae

Local Name: Spalmay
Habit: Shrub
Part Used: Whole plant, Latex
Folk Use: All parts are used for making paste, which along with raw sugar is applied over the dog bitten wounds. The dry leaves are smoked for curing asthma and cough; large doses are poisonous for human beings. The latex is commonly used for ringworm and skin diseases.

Botanical Name: *Cannabis sativa* L.
Family: Canabidaceae
Local Name: Bhang
Habit: Shrub
Part Used: Leaves, Flowering tops, whole plant, Seeds
Folk Use: Leaves are used as green manure. Paste is made from fresh leaves which in anti-lice.
Flowering tops are sedative, anodyne and narcotic. “TANDAI” a cold drink is prepared from its leaves and resinous deposits which give sedation and produce a pleasant excitement. Charas or hashish is also prepared from it which is used with in the country as well as exported abroad.
Plant is used for fuel wood purposes.
Seeds are used as feed for poultry and pigeons. In some cases oil is also extracted from seeds.

Botanical Name: *Cedrella serrata* Royle
Family: Meliaceae
Local Name: Meem
Habit: Tree
Part Used: Bark, Leaves
Folk Use: Stem and root bark is specialized for curing round worms while leaves decoction is excellent hair wash. The juice is administrated in diabetes and it also produces body coldness.

Botanical Name: *Celtis caucasica* L.
Family: Ulmaceae
Local Name: Tagha
Habit: Tree
Part Used: Wood, Leaves, Fruits
Folk Use: wood is used for making agricultural tools and for fuel purposes. Leaves are used as fodder while fruit is edible and applied in colic, amenorrhea and allergy.

Botanical Name: *Cotoneaster nummularia* Fish & Mey.
Family: Rosaceae
Local Name: Kharawa
Habit: Shrub
Part Used: Whole plant
Folk Use: Stem and branches are used for making walking sticks, agricultural tools and fences around the fields.

Botanical Name: *Crataegus oxycantha* Jacq.
Family: Rosaceae
Local Name: Tampasa
Habit: Tree
Part Used: Whole plant, Fruits
Folk Use: Leaves used as fodder, wood for fuel requirements. Fruits are edible.

Botanical Name: *Cuscuta reflexa* Roxb.
Family: Cuscutaceae
Local Name: Maraz Bootay

Habit: Parasitic climber
Part Used: whole plant
Folk Use: Its infusion is anti-lice and used for washing sores.

Botanical Name: *Daphne oleoides* Schreb.
Family: Thymelaeaceae
Local Name: Kutilal
Habit: Shrub
Part Used: wood, Fruits
Folk Use: Fuel wood. Fruit is edible. Its poultice is used for rheumatism.

Botanical Name: *Debregeasia saeneb* (Forssk) Hepper & Wood.
Family: Urticaceae
Local Name: Ajlai
Habit: A water course shrub
Part Used: Branches, wood and fruits
Folk Use: Fruits are edible and also used as flavoring agent. The stem yield excellent fiber. It is used as fuel wood. Branches are used in thatching. The powder made up of aerial parts is mixed with mustard oil and used as antifungal for curing skin rashes, dermatitis and eczema. It is also used as hedge plant.

Botanical Name: Dendrocalamus strictus (Roxb,) Nees
Family: Poaceae
Local Name: Bans
Habit: Tree
Part Used: Leaves, Branches, Stem
Folk Use: Leaves are given to horses for curing cough and cold. Branches are used as building material, for making ladder, thatching huts, carts and pipes. The splits stem is woven into baskets and mats.

Botanical Name: *Desmodium tiliafolium* D. Don
Family: Papilionaceae
Habit: Shrub
Part Used: Leaves, Branches
Folk Use: Leaves serve as fodder for goats while branches are used for fuel purpose.

Botanical Name: *Dodonaea viscosa* (L.) Jacq.
Family: Sapindaceae
Local Name: Ghwaraskay
Habit: A shrubby plant of exposed dry habitat.
Part Used: Leaves, seeds, wood
Local Uses: Astringent, ant rheumatic, aromatic, ornamental and hedge plant. It is used in swelling, burns, thatching and fencing. Its shoots are tied to make brooms.

Botanical Name: *Diospyus lotus* L.
Family: Ebenaceae
Local Name: Tor Amlook
Habit: A wild medium sized tree
Part Used: Fruit, wood, leaves
Local Uses: The wood is used in furniture and as fuel wood. Fruits are edible which are carminative, purgative and causes flatulence, leaves serve as fodder.

Botanical Name: *Diospyrus kaki* L.
Family: Ebenaceae
Local Name: Ziar Amlok
Habit: Grafted in the local *Dyospyrus lotus*

Part Used: Fruits, wood
Local Uses: It is very common commercial fruit tree. It is used in dry and fresh form and is very delicious. It is laxative. The wood is utilized as fuel.

Botanical Name: *Ehretia obtusifolia* Hochst. ex. DC.
Family: Boraginaceae
Local Name: Ghada Bootay
Habit: A medium sized shrub
Part Used: Leaves, branches
Local Uses: Fodder for cattle, fuel wood.

Botanical Name: a. *Elaegnus parviflora* Wall. ex Royle
b. *E. umbellate* Thumb.
Family: Elagnaceae
Local Name: Ghanum Ranga
Habit: Shrub
Part Used: Wood, Fruits
Local Uses: Fuel wood. Fruits are edible and cardiac stimulant.

Botanical Name: *Ephedra gerardiana* Wall. ex Stapf
Family: Ephedraceae
Local Name: Asmani Bootai
Habit: Shrub
Part Used: Fruit and Leaves
Local Uses: The plant is used for curing asthematic bronchitis and rheumatism. The tincture of Ephedra is a cardiac circulatory stimulant.

Botanical Name: *Eruca sativa* L.
Family: Brasicaceae
Local Name: Jammama
Habit: Shrub
Part Used: Leaves, Seeds
Folk Use: Leaves used as vegetable. Seeds are used for extraction of oil, which is hair tonic, antidandruff and used to cure ring worms.

Botanical Name: *Eryngium biebersteinianum* Nervski ex Bobrov
Family: Apiaceae
Local Name: Ali Kanda
Habit: Shrub
Part Used: Shoots
Folk Use: Used as fodder for cattle and goats. Shoots are also stimulant and carminative.

Botanical Name: *Ficus carica* Forssk.
Family: Moraceae
Local Name: Enzar
Habit: Tree
Part Used: Wood, Leaves, Fruit, Latex
Folk Use: wood is used for fuel purpose. Leaves are fodder for goats. Fruits are edible and laxative while latex soothes the bee sting by simply rubbing on the skin. Some time its is used for naming a person (Enzar Gul meaning *F. carica* flower).

Botanical Name: *Ficus racemosa* L.
Family: Moraceae
Local Name: Oormal

Habit: Tree
Part Used: Wood, Leaves, Latex, Fruits
Folk Use: Fuel wood. Leaves infusion is astringent .Useful mouthwash for spongy gums. Stem latex is applied in piles and diarrhea. Fruits are edible, astringent, stomachache and carminative.

Botanical Name: *Ficus religiosa* Roxb.
Family: Moraceae
Local Name: Peepal
Habit: Tree
Part Used: Wood, Bark, Fruits
Folk Use: Low cost fuel wood. Bark decoction is given in gonorrhea and scabies while fruit are edible and laxative.

Botanical Name: *Grewia optiva* Drum. Ex Burret.
Family: Tiliaceae
Local Name: Pastawoonay
Habit: Tree
Part Used: Leaves, Bark of branches
Folk Use: Leaves are used as fodder. Bark from branches are used for fiber and making ropes.

Botanical Name: *Gymnosporia royleana* Wall. ex Lawson.
Family: Celastraceae
Local Name: Soor Azghay
Habit: A spiny shrub of foothills
Part Used: Whole plant
Folk Use: Young shoots are taken by goat as fodder. Hedge plant and fuel wood.

Botanical Name: *Indigofera heterantha* Wall. ex. Brand.
Family: Papilionaceae
Local Name: Kainta
Habit: A medium sized shrub of exposed habitat.
Part Used: Shoots, branches
Local Uses: Shoots serve as fodder for goats. Young branches are twisted into ropes, also tied to make brooms for cleaning roofs and lawns. Fuel wood, for thatching and fencing, wood ash is used for making snuff, honey bee species. Name of place i.e. Ghoreja.

Botanical Name: *Jasminum humile* L.
Family: Oleaceae
Local Name: Zair Rambail Chambail/Yasmin
Habit: Wild ornamental climbing shrub
Part Used: Flowers, whole plant
Local Uses: Ornamental. Root decoction is used for curing ringworms.

Botanical Name: *Juglans regia* L.
Family: Juglandaceae
Local Name: Ghuz
Habit: A wild/cultivated large deciduous tree
Part Used: Nuts, bark, leaves, and wood
Local Uses: It is used in standard furniture, also used for carving. Bark (Dandasa) is used for cleaning and sparkling teeth. Leaves are also used as lips make-up. Nuts can infect throat due to its oily nature. It has warm nature and can cause jaundice. It is also used as a dye. Used in naming i.e., Ghuz. Decoction of leaves is given in eczema and intestinal worms.

Botanical Name: *Justicia adhatoda* L.

Synonym: *Adhatoda vasica* Nees .
Family: Acanthaceae
Local Name: Baikar
Habit: Non palatable shrub
Part Used: Root and leaves
Local Uses: Roots are used in rheumatism, pneumonia and cough. Leaves are applied to reduce swelling. The decoction of leaves is antispasmodic, expectorant, abortifacient and also used for curing dysentery in cattle. It is also used in scabbies and other skin disorders. Used in snakebites, eye and ear ailments. Antiseptic and insect repellent. Honey Bee species.

Botanical Name: *Luffa aegyptiaca* Mill.
Synonym: *L. cylindrica* Roem.
Family: Cucurbitaceae
Local Name: Torai
Habit: A cultivated climbing vegetable
Part Used: Fruits
Folk Use: Fruits are used as vegetable, good for stomach and ulcer problems. Dried fruit case is used for cleaning utensils.

Botanical Name: *Mallotus philippensis* (Lam.) Muell.
Family: Euphorbiaceae
Local Name: Kambeela
Habit: Shrub
Part Used: Wood
Folk Use: Used as fuel wood.

Botanical Name: *Malus pumila* Mill.
Family: Rosaceae
Local Name: Manra
Habit: A cultivated fruit tree with many varieties
Part Used: Fruit, flowers, wood
Folk Use: Valuable commercial fruit, purgative, source of iron, expectorant, used in jams, jellies, marmalades and good for heart. Wood is hard and is used for agricultural tools, branches serves as fuel wood.

Botanical Name: *Melia azedarach* L.
Family: Meliaceae
Local Name: Shundai
Habit: Tree
Part Used: Wood, Leaves, Fruit, Bark
Folk Use: Timber wood, used for making furniture and building materials. Medicinally used for curing fever. Leaves are used as fodder for goats and are carminative. Fruits are eaten by Nightingales in winter, also grind and fed to the goats. Bark is anthelmintic and poisonous with bitter taste.

Botanical Name: *Morus alba* L.
Family: Moraceae
Local Name: Spin Toot
Habit: A cultivated or wild deciduous tree
Part Used: Fruits, leaves, branches, trunk
Folk Use: Fruits are eaten both fresh and dry. They are laxative, purgative. Leaves are emollient, used for cleaning throat, cooling agent, anthelmintic and astringent. Baskets are also made from the flexible branches. Wood is used in furniture. Leaves were once used in rearing silkworms. Leaves are eaten by goats and sheep. Planted as shade tree.

Botanical Name: *Morus nigra* L.

Family: Moraceae
Local Name: Tor Toot
Habit: A cultivated or wild deciduous tree
Part Used: Leaves, fruits, branches, wood
Folk Use: Fruits are eaten however they are laxative, leaves are emollient, used for cleaning throat, cooling agent, anthelmintic and astringent. Baskets are made of flexible branches. Wood is used in making furniture. Shade tree, fuelwood, leaves are fodder for sheep and goats.

Botanical Name: *Myrsine africana* L.
Family: Myrsinaceae
Local Name: Maru Rang
Habit: A medium sized shrub
Part Used: Leaves, fruits
Folk Use: Used for fragrance in tea. Used as spices, carminative, appetizer, flavoring agent, digestive. Fruits are edible, develop taste.

Botanical Name: *Nerium indicum* Mill.
Family: Apocyanaceae
Local Name: Gundary
Habit: Shrub
Part Used: Whole plant
Folk Use: Ornamental but poisonous. The leaves decoction in the form of paste is applied externally on the skin to prevent skin diseases.

Botanical Name: *Olea ferruginea* Royle
Family: Oleaceae
Local Name: khoona
Habit: Medium sized tree
Part Used: Wood, Leaves, Bark
Folk Use: Wood is very hard and used for making sticks, agricultural tools and for construction. Also used as fuel wood. Leaves are used as fodder and leaves decoction is also used for toothache, gonorrhea while bark is used in curing fever.

Botanical Name: *Opuntia dilleni* Haw.
Family: Cactaceae
Local Name: Zuqam
Habit: Shrub
Part Used: Phylloclades, Fruits
Folk Use: Phylloclades poultice is used for extracting guinea worms. Fruits are edible, demulcent and expectorant. The ripe fruits juice is useful remedy for asthma and whooping cough

Botanical Name: *Otostegia limbata* (Benth.) Boiss.
Family: Lamiaceae
Local Name: Spin Azghay, Pishkanr
Habit: A small sized shrub
Part Used: Leaves
Folk Use: Used in gum diseases and curing of wounds.

Botanical Name: *Parratiopsis jaequimontiana* Dene
Family: Hemmameledaceae
Local Name: Beerunj
Habit: Tree
Part Used: Wood, Leaves, Branches
Folk Use: Wood is used for making agricultural tools, utensils and sticks. Leaves are fodder while

branches serve as fuel wood.

Botanical Name: *Picea smithiana* (Wall.) Boiss.
Family: Pinaceae
Local Name: Mangazaey
Habit: Characteristic conifer of moist temperate forest
Part Used: Whole tree.
Folk Use: Timber wood used in bridges, building houses, fuelwood. Leaves are used to keep fruits in crates.

Botanical Name: *Pinus roxburghii* Sargent.
Family: Pinaceae
Local Name: Nakhtar
Habit: A characteristic tree of subtropical pine forests
Part Used: Whole tree
Folk Use: Timber wood, fuelwood, used for making furniture, cones are used for burning and decoration purposes. It yields edible seeds. Needles are used for sheltering and for keeping fruits in crates.Resin of bark, locally known as "Jaula", is stimulant used in ulcer, snake bites, scorpion stings, skin diseases and blood purifier. Saw dust is used by barbars to warm water, it is also used for cleaning utensils. It's name "Nakhtar" is termed for a tall person.

Botanical Name: *Pinus wallichiana* A. B. Jackson
Family: Pinaceae
Local Name: Peeuch
Habit: A characteristic tall tree of moist temperate habitats
Part Used: Whole tree
folk Use: Valuable timber wood, used for house building, making furniture, used in match industry, making bridges and beams. Cones are used as ornamental.

Botanical Name: *Pistacea integrima* J. L. Stewart ex Brandis
Family: Anacardiaceae
Local Name: Shnai
Habit: Tree
Part Used: wood, Leaves, Fruit
Folk Use: Wood yield timber which is used for making furniture. Leaves serve fodder for cattle .Tonic, antiseptic. Fruits and galls extract is given in jaundice. Also used for curing chronic wounds.

Botanical Name: *Platanus orientalis* L.
Family: Plantanaceae
Local Name: Chinar
Habit: Tree
Part Used: Wood, Bark
Folk Use: wood yield timber, fuel wood. Bark is useful remedy in diarrhea and dysentery.

Botanical Name: a. *Populus caspica* Bornm.
b. *Populus ciliata* Wall.
Family: Salicaceae
Local Name: a. Sufaida, Spari dar
b. Zangali Sufaida
Habit: Tall cultivated tree especially on roadsides
Part Used: Leaves, wood
Folk Use: Used as fuel wood, ornamental, shade tree, used for making shelters for tobacco drying. Leaves serve as fodder for goats and sheep.

Botanical Name: *Prunus domestica* L.

Family: Rosaceae
Local Name: Alucha
Habit: A medium sized cultivated fruit tree with many varieties
Part Used: Fruit, wood, leaves
Folk Use: Commercial fruit is used in jams and jellies. It is laxative, flavoring agent. Fruit pulp is used in chutneys. Wood is used for burning. Leaves are used as fresh fodder. It is honeybee species.

Botanical Name: *Prunus armeniaca* L.
Family: Rosaceae
Local Name: Varieties: Khubani, Zardaloo and Asharay
Habit: A cultivated fruit tree with many varieties
Part Used: Fruits, wood, leaves, seeds
Folk Use: Fruits and seeds are eaten both fresh and dry. It is laxative, gum is obtained, fuel wood and honeybee species. Leaves serve as fresh fodder.

Botanical Name: *Prunus persica* (L.) Batsch.
Family: Rosaceae
Local Name: Shaftalu
Habit: A small sized wild/cultivated fruit tree with many varieties
Part Used: Fruit, leaves and wood
Folk Use: Fruits edible, fuel wood, leaves serve as fodder.

Botanical Name: *Punica granatum* L.
Family: Punicaceae
Local Name: Ananghorai
Habit: A wild/cultivated fruit yielding small bush like tree
Part Used: Fruit, bark, leaves
Folk Use: Leaves are used in skin diseases, dysentery. Fruit is astringent, cooling, blood purifier. Fruit pericarp is used for whooping cough, it is laxative. Seeds are dried and known as "anardana" which are condiments and used as spices. Bark of stem and root is anthelmintic, mouthwasher, antipyretic and expectorant. Used in naming i.e., Anar Gul (Flower of pomegranate).

Botanical Name: *Pyrus pashia* Ham ex. D.Don.
Family: Rosaceae
Local Name: Tangai
Habit: A wild fruit tree
Part Used: Fruits, wood
Folk Use: Fruits are edible, astringent, febrifuge, sedative and laxative. Fuel wood. It serves as rootstock for grafting apple and pear. Honey bee species.

Botanical Name: *Pyrus communis* L.
Family: Rosaceae
Local Name: Nashpati
Habit: Cultivated tree with many varieties
Part Used: Fruits, wood
Folk Use: Fruits are edible and have a commercial value. Wood is used for burning purposes. Honey bee species.

Botanical Name: *Quercus floribunda* Lindley ex A. Camus
Synonym: *Q. dilatata* Lindley ex Royle.
Family: Fagaceae
Local Name: Tor Banj
Habit: A slow growing tree
Part Used: Wood and nuts

Folk Use: Fuel wood species. Seeds are edible, astringent and diuretic, used in diarrhea, indigestion and asthma. Children play marbles with seeds. Due to its toughness, the wood is used in agricultural tools, handles of plough, axes, gun buts, and walking sticks. Children use seed cups as playing tops.

Botanical Name: *Quercus baloot* Griffith
Synonym: *Q. ilex* L.
Family: Fagaceae
Local Name: Tor Banj
Habit: A slow growing tree
Part Used: Wood
Folk Use: Timber, fuel wood, Wood is also used for making agricultural tools specially ploughs and handles.

Botanical Name: *Quercus leucotrichophora* A. Camus
Synonym: *Q. incana* Roxb.
Family: Fagaceae
Local Name: Spin Banj
Habit: A slow growing tree
Part Used: Wood
Folk Use: Timber, fuel wood, used for making agricultural tools specially ploughs and handles.

Botanical Name: *Rhododendron arborium* Smith
Family: Ericaceae
Local Name: Namair
Habit: Tree
Part Used: Wood, Flowers
Folk Use: Fuel wood. Flowers are ornamental and are sold in the market. Flower petals are tonic and are eaten by local people.

Botanical Name: *Ricinus communis* L.
Family: Euphorbiaceae
Local Name: Arund, Harhanda
Habit: A perennial herbaceous shrub
Part Used: Leaves, seeds, oil
Folk Use: Leaves are emetic, narcotic, poisonous and purgative. Poultice is applied to swellings. Castor oil is purgative, oil is given in constipation before and after child birth to mother. Seeds are sedative.

Botanical Name: *Robinia pseudacacia* L.
Family: Papilionaceae
Local Name: Kikar
Habit: A cultivated tree
Part Used: Flowers, wood
Folk Use: It is introduced and cultivated for stopping erosion and fuel wood. Leaves serve as fodder for goats, also used in fencing and hedges, honeybee species.

Botanical Name: *Rosa moschata* J.Herm.
Family: Rosaceae
Local Name: Zangaley Gulab
Habit: Climbing shrub of hilly areas
Part Used: Flowers, branches
Folk Use: Ornamental, aromatic, used in fencing and hedges, Honey bee species. Used in naming i.e., Gulab Khan.

Botanical Name: *Rosa serica* Lindley.
Family: Rosaceae
Local Name: Zangali Gulab
Habit: Climbing to prostrate shrub
Part Used: Flowers, branches
Folk Use: Used for curing piles, ornamental, cultivated at the edge of fields as fencing and hedge plant, honeybee species.

Botanical Name: *Rosa webbiana* Wall. Ex Royle
Family: Rosaceae
Local Name: Palwari
Habit: Climbing to prostrate shrub.
Part Used: Flowers, branches.
Folk Use: Ornamental, cultivated at the edge of fields as fencing and hedge plant, honeybee species.

Botanical Name: *Rubus ellipticus* Smith
Family: Rosaceae
Local Name: Sra Karwara, Bagana
Habit: A climbing shrub
Part Used: Fruits and leaves
Folk Use: Leaves serve as fodder for goats, hedge plant.

Botanical Name: *Rubus fruticosus* Hk.f.
Family: Rosaceae
Local Name: Karwara
Habit: A prostate to climbing shrub
Part Used: Fruits, leaves and shoots
Folk Use: Leaves are used for diarrhoea, cough, fever, used as diuretic, carminative and fodder for goat. Fruits are edible and used in jams and jelleys. Hedge plant.

Botanical Name: *Rubus ulmifolius* Schott.
Family: Rosaceae
Local Name: Goorag
Habit: A prostrate to climbing shrub
Part Used: Fruits, leaves
Folk Use: Leaves are used as fodder for cattle.Fruits are edible and are used as carminative. Hedge plant.

Botanical Name: *Salix babylonica* L.
Family: Salicaceae
Local Name: Wala
Habit: Deciduous tree along watercourses
Part Used: Whole tree
Folk Use: Fuel wood, small sticks are cut and used in weaving cloth and "Azarband"(the woollen belt for Shalwar) at homes, used in making cricket bats and light furniture, ornamental, mud supporter and prevent erosion. There is an interpreting Pushto sentence: "Da-Waley (streams)-Waley (Willow tree)-Waley(why)-Waley(hitting)" means "why are you hitting willows of the stream?"

Botanical Name: *Salix tetrasperma* Roxb.
Family: Salicaceae
Local Name: Wala
Habit: A deciduous tree along water courses
Part Used: Whole tree
Folk Use: Fuel wood, planted along water courses to prevent soil erosion, mud supporter, used in making cricket bats and light furniture.

Botanical Name: *Skimmia laureola* (DC.) Sieb. & Zucc. Ex Walp.
Family: Rutaceae
Local Name: Nazar Panra
Habit: Shrub
Part Used: Leaves
Folk Use: Used in curing small pox. It is believed that smoke from leaves purify air and repel evils.

Botanical Name: *Tylophora hersuta* L.
Family: Asclepiadaceae
Local Name: Gilo
Habit: Climber
Part Used: Root, Leaves
Folk Use: Root and leaves decoction is used for jaundice. The dried leaves are emetic, diaphoretic and blood purifier. Along with opium it is used in asthma and whooping cough.

Botanical Name: *Viburnum cotinifolium* D. Don
Family: Caprifoliaceae
Local Name: Zangali Chamyarai
Habit: Tree
Part Used: Fruits, branches
Local Uses: The fruits are edible, branches serve as fuel wood.

Botanical Name: *Viburnum foetens* (D.Don) Wall. ex DC.
Family: Caprifoliaceae
Local Name: Ghar Meva
Habit: Shrub of exposed habitat in temperate forests
Part Used: Fruits, branches
Local Uses: The fruits are edible, branches serve as fuelwood.

\otanical Name: *Vitex negundo* L.
Family: Verbinaceae
Local Name: Marvandaey
Habit: A medium sized shrub of water courses and graveyards
Part Used: Leaves, roots and branches
Local Uses: Fresh roots are used as bandage to relieve pain of chest and back, branches are used as toothbrush (Miswak), leaves are aromatic, febrifuge, diuretic and anthelmintic. Leaves are smoked to relieve headache. Flowers are astringent and tonic. Non-palatable, used for making shelters for tobacco seedlings.

Botanical Name: *Vitis jacquemontii* R. Parker
Family: Vitaceae
Local Name: Gedar Kwar
Habit: A perennial wild climber, sometimes covering whole tree
Part Used: Fruit
Local Uses: Wild edible grapes, laxative

Botanical Name: *Withania somnifera* (L.) Dunal.
Family: Solanaceae
Local Name: Kutilal
Habit: Shrub
Part Used: Leaves fruits and roots
Local Uses: Leaves and roots are used as poultice to swellings, ulcers and carbuncles. The fruit is diuretic. The root is an aphrodisiac tonic, diuretic, narcotic and used in rheumatism.

Botanical Name: *Woodfordia fruiticosa* (L) Kurz
Habit: Shrub
Part Used: Wood
Folk Use: Used as fuel wood species.

Botanical Name: *Xanthium strumarium* Linn.
Family: Asteraceae
Local Name: Ghut Ghiskay
Habit: Shrub
Part Used: Leaves
Folk Use: Leaves decoction is recommended in long-standing malarial fever.

Botanical Name: Z*anthoxylum armatum* DC.
Family: Asteraceae
Local Name: Dambara
Habit: A medium sized spiny shrub
Part Used: Bark, fruit, stem, seeds
Folk Use: Fruit is used as stomachache, carminative, used in toothache. Seeds are used as condiment, flavoring agent, tonic, aromatic, used in fever, cholera, increases saliva secretion, used in chutney and increases cow milk. Young shoots are useful in gum diseases, also used as toothbrushes. Stem and branches are used to make dreadful sticks (Dambaray sotay) to kill snakes and keeps the dogs away.

Botanical Name: *Zizyphus jujuba* Mill.
Family: Rhamnaceae
Local Name: Baira
Habit: Tree
Part Used: Wood, leaves, roots, bark, fruits
Folk Use: Fuel wood. Fodder for goats. Edible, bloods purifier and cure indigestion. Fruit decoction is excellent hair wash and also used for bronchitis. Bark macerated in milk is given along with honey in diarrhea and dysentery. It is a major ingredient of “Joshanda” which is used for cough and cold.

Botanical Name: *Zizypus numularia* (Burm. f.) Wight & Arn.
Family: Rhamnaceae
Local Name: Kurkanda
Habit: Shurb
Part Used: Roots, fruits, branches and leaves
Folk Use: Fuel wood. Fodder for goats. Edible and laxative with sour taste. Also used as hedge plant. Branches are also used for fencing. Leaves are used in scabbies and boils.

Botanical Name: *Zizyphus oxyphyla* Edgew.
Family: Rhamnaceae
Local Name: Elanai
Habit: Shurb
Part Used: Roots, fruits
Folk Use: Roots are used in curing jaundice. Fruits are edible and used in gas trouble.

Botanical Name: *Zizyphus sativa* Gaertn.
Family: Rhamnaceae
Local Name: Markhanaey.
Habit: Spiny medium sized tree
Part Used: Fruits, branches
Folk Use: Fruits are edible, used as astringent, cooling. Fuelwood, used in fencing and hedges, leaves fresh fodder for goats. Honeybee species.

Discussion

Plants provide us ready made food, medicines for ailment, fodder and forage for our domestic animals, fuel wood for burning, flowers for aesthetics and celebration, raw materials for many industries, timber for construction and many more useful items. Humans are using these natural resources in some parts of the globe very ruthlessly and one such area is the Hindu- Kush, Himalayas region. The natural resources in the Hindu Kush - Himalayas is deteriorating more rapidly than many other global regions, but had received little attention internationally than other ecosystem. However, it is now time to realize that the traditional knowledge and management system are as important as the need to introduce modern innovative approaches to sustainable development and management of natural resources in order to sustain the livelihood of traditional societies in the Hindu Kush-Himalayan region (ICIMOD 193).

People use plants in many ways such as medicinal, timber wood, fuel wood, food, fodder etc (Hussain and Khaliq, 1996). So there is a great impact of human life on local vegetation as well as local vegetation influence human life (Delcourt, et al. 1986).

The people of Buner are mostly rural and illiterate. They cut forest and sell it as timber and fuel wood. They also use valuable timber wood for fuel wood requirements. The ever increasing population requires more food and as a result forests were burnt, cleared and replace with cultivations. In Buner, forests of *Abies pindrow* Royle, *Acacia modesta* Wall., *Aescules indica* Wall ex.Cambl., *Cedrus deodara*, *Dodonea viscosa* (L.) Jacq., *Juglans regia* L., *Pinus roxburghii* Sergent, *Pinus wallichiana* A.B. Jackson, *Quercus dialatata* Lindley and *Quercus incana* Roxb., have been destroyed at alarming rate.

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