

Pig Pastoralism in Odisha - A Study



By

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Introduction:

The state of Odisha is situated on the east coast of India between 17degree 48 min-22degree 34 min North latitude and 81degree24 min-87degree 29 min East latitude. It has a total geographical area of 155707 square Km and is administratively divided into 30 districts.

The domestic animal biodiversity of Orissa constitutes cattle, sheep, goat, pig and poultry birds. The state comes under the tropical geo-climatic condition and is famous for its natural resources like forests, vast tract of mountains and valleys, gullies with perennial vegetation and scattered grass lands. These natural resources facilitate pastoralism, although recent rapid industrialization with mineral excavation in tribal dominated area has reduced animal husbandry activities to a great extent. Many livestock pastoralists of recent generation are unwilling to carry animal grazing and are rather choosing to come to urban and mining area for petty work of soil digging, quarries and driving vehicles. But pig pastoralism is very much present in Odisha, denying the general perception that pastoralism in pig is absent.

Factors contributing to continued pig pastoralism are many. Out of these, factors such as the local breeds of pigs are disease resistant, less stall-feeds demanding, low external input requiring and above all pigs serve as the “food basket” of poor in the lower stratum of the society and weapon for facing climate change and consequential repeated crop failure, are important.

All most all the pig population of Odisha is of native breeds baring few Government owned pig farms which rear hybrids like Landrace, Yorkshire etc. One of the other most important factors of continued pig pastoralism in Odisha is that pigs are reared by the lower castes, which rear pig as tradition by birth, since their fore fathers .These pigs not only serve as their “food basket” or “protein basket” of the poor but also as “running bank account”. Native pig pastoralists deny

accepting other profession to earn lively hood than rearing pig, for the fact that, pig rearing by grazing is low external input based and a big source of “food security”. Although pig pastoralists in general are more eccentric, secluded and less articulating than any other pastoralists, they are fiercely protective of their own way of leading life with pig pastoralism.

Native Breeds of Pigs- Native breeds of pig have no common name.

However,
some pig
pastoralists
call them
“Pakhri”,
“Swara” in
coastal
districts.
Tribal
pastoralists
call them
“Deshi
Ghusuri”.



Native breeds of pig are dark skinned, 2-2.5 ft length and 1.5 -2 ft height. A one year old pig weighs up to 30-35 kg. Some of the pigs in same herd and same breed; have a feature of a pair of wattle like structures on dew lap, below the muzzle. Local pastoralists term these pigs as “Ghantia” pigs. “Ghanta” means bell in Odia language. Pastoralists treat these “Ghantia” pigs as robust and lovable.



A pig with wattle like structure

How old is pig pastoralism in Odisha- Pig pastoralism in Odisha is very old. It dates back to the period of ***Goutam Budhha***. Some pig pastoralists claim that they are decedents of Lord “Vishnu” who had taken an incarnation Of “Barah” meaning “Wild Boar”. Tribes of Domb, Oram, Kela, Ghasi, Kandara, Sanara, Khadia, Leheri rear pigs since time immemorial. They were keeping pigs for cleaning the human habitation, as pigs eat human excreta as well as other garbage. These animals help them in their work of cleaning the villages and “Nagar” or cities as well as serve as a source of meat. Later on, pigs are reared exclusively by them for food and livelihood. Tribes like Khadia, Leheri, Oram, Santhals, Gonds and Dombs rear pigs for food. Some of these tribes are Christians and they mostly rear pigs for food purpose. They also rear pig as a tradition from ancestors.



A tribal Christian lady pig pastoralist

Who are the Pig Pastoralists - Pig pastoralists mostly belong to lower castes of Hindu like Domb, Ghasi, Kela, Sanara, Ganda, Bauri and Kandara in coastal districts of Cuttack, Puri, Khurdha, Nayagarh and Balasore and tribal and christians belonging to Oram, Khdia, Leheri caste rear pigs of local variety.



The “Kela” –nomadic pig pastoralist

Now a day’s fishermen (Gukha caste) and small farmers, mostly in coastal districts also rear native pigs as source of livelihood, by means of free grazing and pastoralism. In coastal districts, where there is over exploitation of marine and river fish, fishermen switch over to pig rearing by grazing in the river bank area. Easy availability of fish offal, leftovers from fish and prawn processing plants encourage pig pastoralists in this area.



A fisherman of “Gukha” caste

Tribes of Khadia, Oram, Leheri belonging to Christian community and tribes like Kondh, Gond, Santhals, Munda belonging to Hindu rear pig in districts of Sundargarh, Sambalpur, Mayurbhanj district.



The “Domb” pastoralist



A tribal “Oram” lady pig pastoralist



Ms Alexia Soreng, a Christian pastoralist

Modes of Pastoralism- Most of pig pastoralists, belonging to “Kela” tribes are nomadic, while Oram, Khadia, Leheri, Santhals, Domb, Ghasi, Sanara and Patra are not nomadic. Nomadic pastoralists move in group with their animals and build small polythene, foldable tents called “Pallaa” near villages, outside the



village habitation. Other pastoralists like Oram, Khadia, Leheri, Santhals, Domb, Ghasi, Sanara and Patra take animals for grazing every day. Sometimes Patrs take their animals for few days and return back within few days. The time of nomadic pastoralists is very hard during rainy and cropping season, when they have to be extra cautious in guarding their herds of pigs, lest they should damage the standing crops. Many times they have to tolerate harassment from villagers, police for the blame of damaging the crop by their animals. Adivasis like Orams, Santhals,

Khadia, Leheris graze their animals in forests on daily basis. They take their animals early in the morning and bring them back in the evening. In winter and summer, all pastoralists graze their animals in crop fields where the crop cutting is over. Pigs pick up paddy and other grains including local vegetation during and after crop cutting like paddy cutting.



A temporary "Palla"

A. Nomadic Pastoralism- The nomadic Pig pastoralists graze pigs by migration on month basis depending upon the resource availability and season. They pitch their "Palla' on the uplands, outside village and stay there till they feel the resources are scanty. They carry their family including wife and children. Old people stay back at home. While in migration pastoralists make friendship with local shop keepers, village healers etc for their daily need and health of themselves and their animals.





Children and house wives in “Palla”



A Permanent Palla-old and sick persons remain back

Back Home Old persons do extra income by making brooms from local vegetation like leaves from date pals and other grass. They also collect wild cashew nuts for them. Their pigs also love to eat cashew nuts, a lot-says one old pastoralist, Mr Krushna Das



Broom making by an old and sick pastoralist

B.Grazing in coastal area by traditional pastoralists- Pig pastoralists, grazing animals in coastal districts, depends mostly on the local saline vegetation as well as the wastes from the fisheries. They take animals on daily basis. In the morning the animals are let loose and herders graze them and return in the evening.



Grazing in coastal area



A pastoralist of “Gukha” caste

Pig pastoralists of Gukha caste take their animals to the sea and river coast. They are from fishing community. Apart from grazing the animals on local vegetation, they graze animals' around habitation of fishing community, so that pigs feed upon fish wastes.

C.Grazing in forests-Tribal pastoralists belonging to Oram, Khadia, Leheri, Santhal and Christian community graze their pigs in forests. Generally these forests are their village forests, in the outskirts of their villages. They do not give much time in grazing, Pigs are let loose in the morning and they return back home in the evening. Pigs eat forest fruits, twigs, wild tapioca, under soil nuts, white termites from ant hills and rainy insects. Sometimes animals are fed in the evening or in the mid day time, after return from the graze. Women folk usually keep eye on the herds .Women usually calls their animals from the forest by whistling. Some

women also use the sound of utensils by biting with some solid objects. Animals listening to these sounds come back home and they expect food in their manger. A manger may be from wood or from a cut truck tire, where feed is poured in.



Grazing in forest

D. Peri -urban Grazing-Now a day some pig pastoralists keep their pig herds around towns and cities. The main objective of keeping these animals in cities is easy availability of left over foods and kitchen wastes from hotels, school and college hostels. They also collect offal from city slaughter houses, roadside chicken stalls. Offal like intestines, poultry feathers, fish intestines is most liked by the pigs.

Instead of long grazing, they graze animals for less time in outskirts, peripheral vegetation and most of the times keep animals in small houses and give these



collected food and kitchen wastes. They collect food in small buckets with help of trolleys.



Food Collected by pastoralist from Hotels and hostels in cities and towns

Food eaten by native pigs-While in grazing, pigs eat varieties of food. As natural scavengers, pigs love to eat human excreta. It is their first preference-says Sri Naba Kishore Das, a “Kela” tribe, in Kendrapara district. He is grazing pigs for last 30 years or more. Apart from human excreta pigs eat other things like grains,

vegetation like leaves, tubers, roots, twigs, nuts, fruits, kitchen wastes, rice bran, and flowers. These animals love to eat potatoes and groundnuts mostly in the standing crops by burrowing.

Pigs love to eat white termites from anthills in forest, larvae from cow dung heaps and earth worms present in the under tree “humus” present in the forest-say Ms Alexia Soreng, a Christian, lady, tribal pastoralist of village Amba Guva, Ghushra Bahal of BadaGaon block in Sundargarh district. They also love to eat the leaves of “Saru”/”Arbi” (*Colocacia esculanta*)-she adds.

My pigs love to eat fishery wastes near the sea coast and river bank of Baitarani-says Mr Dayanidhi Dash of village Baligaon of Gajigiri area in Chandabali area of Bhadrakh district. He is a “Gukha pastoralist”. He is grazing pigs for last 20 years. Pigs in tribal area of Kutra, Badagaon in Sundargarh district eat lot of jack fruits in forests. These pigs love both the seeds and fleshy part of the jack fruit. During summer and beginning of rainy, pigs eat lot of Black Jamun (*Syzygium cumini*) and mangoes along with its cornel in forests.

On return from grazing, my pigs love to eat “Mera” (The residue from rice fermentation done by tribal during alcohol production at home) and rice-Says Mrs. Patricia Minj, a young tribal pastoralist.

Food & Vegetation-

Grass, Leaves and Roots-

Bermuda grass (*Cynodon dactylon*),

Roots of Mutha grass (*Lipocarpha sphacelata*),

Roots of “Gai chira” (*Scirpus articulatus*),

Roots of “Keruan” (*Holarrhena atidysentrica*),

Leaves of “Saru” (*Colocacia esculanta*),

Tubers of “Saru” (*Colocacia esculanta*),

Leaves of “Madaranga” (*Enydra fluctuans*),

Roots of “Chinchiri”,
Leaves of drumstick “*Moringa oleifera*”,
Root Tapioca (*Ipomea batatas*),
Leaves of “Kalamba” (*Ipomea aquatica*)
Aloo- “Potato” (*Solanum tuberosum*)
Cabbage (*Brassica oleracea*)
Roots of lily flower (*Nymphaea pubescens*)
Pita aloo (*Dioscorea bulbifera*)

Grains

Paddy (*Oryza sativa*)
Maize (*Zea mays*)
Ragi (*Elusine coracana*)
“Suan” ((*Panicum frumentacea*)
“Kodo” (*Pasplum scrobiculatuc*)
Jowar (*Sorghum vulgare0*)

Flowers, fruits, seeds and nuts

Flower of Mahula (*Madhuca indica*)
Fruits - Cashew (*Anacardium occidentale*)
Fruits-Mango (*Mangifera indica*)
Fruits-Jamun (*Syzygium cumini*)
Seeds of jamun (*Syzygium cumini*)
Seed stone of mango (*Mangifera indica*)
Nuts-groundnuts (*Arachis hypogea*)
Nuts of cashew (*Anacardium occidentale*)
Jackfruit and its seed (*Artocarpus heterophylus*)

Food by products

Peels of paddy (rice bran), fruits, vegetables, grains

Oilcakes-groundnuts, sesame

“Mera”- residual by products from fermented beverage made from rice, sugarcane, fruits

Bye products from fisheries, prawn, crab processing plants

Cooked Food

Rice

Gruel

Molasses

Soup

Dalia

Cooked rice bran

Insects, maggots and worms

Termites

Cow dung maggots/larvae

Rain termites

Earthworms

Nonconventional food

Poultry feathers

Fish and prawn scales

Photo Gallery of Food and vegetation of native pigs



Roots of Mutha grass (Lipocarpa sphacelata),



Roots of "Gai chira" (Scirpus articulatus),



Roots of "Chinchiri", (Furrows are made by pigs)



Leaves of "Kalamba" (Ipomea aquatica)



Leaves of "Madaranga" (*Enydra fluctuans*),



Roots of lily flower (Nymphaea pubescens)



***Pokhari saga
(Pond spinaches)***



***Bermuda grass
(Cynodon dactylon),***



Paddy (Oryza sativa)



Maize (Zea mays)



At home maize being given by the lady



Ragi (*Elusine coracana*)



Flowers of mahula (*Madhuca indica*)



Cooked rice and ragi given by lady pastoralist



White termites



Feeding on maggots/larvae/earth worms in cow dung slurry



Jack fruits and seeds are liked by pigs

Cashew nuts for piglets

Housing for pigs-Nomadic pig pastoralists do not make any housing arrangements for their pigs during move. Animals are let loose to take rest in nights under the open sky. In case of heavy rains, pigs share the nights with the pastoralists in their temporary “Palla”. But in the villages where they have their permanent “Palla”, pastoralists make pig houses made up of brick or stones with mud and thatched roof. When they come back, they use these houses for their animals. Sometimes they leave sick animals in these houses.



A pig house in village of the nomadic pastoralists



Pigs in nights under the open sky.

In case of pigs reared by grazing on daily basis, pastoralists in coastal districts make small pig houses made of bamboo and stoned floor. The get is of medium size which can allow only one adult pig to go in and out. The roof is either thatched or covered with polythene sheets and on its top layered with tree branches, palm leaves or dried wild grasses.



A pig house in coastal area

In tribal areas, where pig pastoralism is not nomadic, pastoralists let loose their animals in morning, to graze in local vegetation, natural food like fruits, flowers, insects, termites, maggots etc in village forests, natural food as well as village wastes in and around village. In the evening, pigs return back home. Pastoralists make small pig houses near to their own house, so that they can keep eyes on them properly. These pig houses are small with brick and clay made walls, stoned floor and clay- made- tiled roof. The roof and wall looks colorful as the clay made tiles, locally called “Khaparly” are prepared by clay and fire. The house has usually a small entry, through which animals generally krawl into the house. The entry point only allows one pig to enter or exit from the house. Tribal pastoralists always make a front yard where the animals are fed. Generally they collect thrown away truck tires from cities and use it as food tray.



A pig house roofed with clay tiles



Clay made burnt tiles (Khaparly) for roof



A pig house roofed with clay tiles



A food tray made from truck tyre

Diseases of local pigs- Native breeds of pigs are relatively disease resistant. However these pigs also suffer from non specific respiratory distress, which is the most important factor of pig mortality in native breed. This non specific respiratory distress is seen in rainy and winter season. Sometimes Pasteurellosis (respiratory/pneumonia) is also reported in some clusters of cross bred pigs. But due to difficulties in catching pigs, vaccination is not practiced in almost all pig herds. The piglet mortality is seen in native herds. This is mostly due to lack of good food, mothers' milk after birth and also due to non specific respiratory distress. Hog cholera is almost absent in native breeds, but cross bred pigs are prone to Hog Cholera. FMD is not a big problem in local pigs although it is seen in crossbred pigs.



Sick pigs with respiratory distress

Piglet anemia is not a problem in grazing piglets, as is frequently seen in stall fed, cross bred pigs. But piglet mortality due to non availability of mothers' milk is frequently observed. Milk secretion in farrowing mothers is required to be increased to save piglets, says Sri Natha Patra of village Bartani (Patra sahi) in Rajkanika block of Kendrapara district. Pig pastoralists give groundnut oil cakes to increase milk in mother pigs.

Breeding Practices- Pig pastoralists breed their sows with the most robust boar present in the area. Sometimes they exchange boars with the other herd. To stop breeding by weak boars, pastoralists usually castrate them with indigenous method. This also helps weak boars to gain fat. Usually a female piglet attains puberty by 4-5 months of age and is generally bred at the age of 10 months. A pregnant sow gives 6-7 piglets at a single farrowing. Annually there is two times farrowing in sows if the feed availability is optimum. In native pigs, there is usually 50-60 % piglet mortality .Per sow; near about 4-5 piglets survive, a year. At the age of 1-1.5 years, a pig attains an average weight of 30kg.



A peri-urban pastoralist hires an exotic pig for crossing his native pig

To increase fast body weight gain, some pastoralists now cross breed their animals with exotic breeds like White Yorkshire, Landrace etc. These F1 generation are good in body weight gain in the local climate with the condition of free grazing. These exotic boars are available from Government farms, and pastoralists bring them for breeding purpose. Very few herders like “Kela” resist breeding their animals with exotic blood for the fear that cross bred are prone to diseases and are not good grazers.

Pork, food security and weapon to reduce poverty and protein

hunger-Pig is our “food granary” –says Mrs. Beya Christina, a tribal ,Christian, lady pig pastoralist from village Kulenbahal (Mahuapada) in Kutra block of Sundargarh district. Mrs Christina speaks how they totally depend upon their pigs, when their crop fails due to scanty rain. Two years back, they had severe drought and they survived the distress period, because they had pigs. During drought we produce our own pork by slaughtering the animal in a place outside the village, may be under a tree and sale a major portion of it and eat the other portion, says Mr. Rajesh Bilung of the same village. Pig pastoralists send pork to their relatives as gift, wishing good health. A young lady when gives birth to a baby, she gets gift of pork in increment from her mother side, as a token of love, for good health of the mother and the baby. Pork also increases our vitality and gives good energy to work in the field-says Mrs. Merry Bilung, a young tribal lady from Kulenbhal .Pork eating also increases milk production in delivering ladies, she adds. Pork bartering is still present in tribal areas of Odisha, where people give pork and get back paddy, pulses as barter. Of course, the calculation is done on the price of the pork. Most of the pig keepers dry pork under sun or even smoke them by adding salt and turmeric. As the native breeds of pigs have less fat, keeping quality of dried pork is better than the pork from exotic pigs. Dishes prepared from pork are a must when our relatives visit our house, says Mr. Gandhras Minj of village Khatkurubahal in Kutra block of Sundargarh district and Sri Krushna Das of village Tangi Bhansar in Puri district. This is a mark of respect and good wish for the good health of visiting relatives and guests.

When I fall sick, I stop eating my regular meals. My stomach gets upset due to doses of antibiotic I take. I only relish steamed and salted pork during that time, say Mr. Banamali das, a nomadic pastoralist of village Singri in Pattamundai block of Kendrapara district. When our daughters and daughter in-laws become pregnant, what better nutritious food can we give, other than pork, asks Mr. Das.

Pork marketing and pig Economy-A 1.5 year old pig weighing 30-40 kg fetches 4-5 thousand rupees. A sow gives at least 6 piglets (some another 6 piglets die) annually and hence fetches Rupees 25,000 to 30,000 in one and half year. Pastoralists generally sale their live animals locally in weekly markets. Many times local meat providers purchase pig from pastoralists, either from their house, or from the “palla” as in case of nomadic pastoralists or from the weekly market and sale in weekly market itself. These meat providers are like middlemen, who may be the friend or relative of the pastoralists. In case of pigs bought from the nomadic pastoralists, the middle men are the local butchers/meat providers, who slaughter the animals and sale them in the daily market in towns or in weekly markets in village areas. There is more selling of pork in marriage season, festivals like Independence Day, Republic day, Christmas holidays. In Christian community, pork consumption is more in days of Easters, New Year celebration, Christmas and main national holidays like Independence Day and Republic Day. Marriage ceremony without Pork dishes is impossible in tribal community-says Mr. Nicholas Inder of village Latagaon in Badgaon panchayat of Sundargarh district. It is observed that there is great demand of pork by local tribes as well as by upper castes in urban area. In urban area pork sales at Rs 120/kg in all seasons, where as cost of one kg of mutton/chevon is Rs 320/. It may go high in marriage seasons.

No value added products like pig sausages, ham, pork burgers are in demand in the local area of Odisha. Pork eating is still a taboo among upper caste people, although young persons prefer pork dish while taking alcohol in leisure hours and celebrations.

Pig pastoralists make good margin money and profit by grazing pigs in free ranging system. Local people say pig pastoralists are “Kings” because of the profit they make and are called “wretched” because of the life style they maintain.

In case of pork marketing, distress selling in large scale, is generally not seen. But in face of pig mortality by contagious diseases, sometimes pastoralists sale their stock in lower price. Some nomadic pastoralists of “Kela” tribe sale their stock to middlemen coming from cities of neighboring states like Kolkata and Visakhapatnam, where pork has great demand. “Kela” pastoralists are hard bargainers and always look for favorable marketing situation to sale their stocks at better price. Hotels in cities of Odisha are low consumers of pork. So unlike goat farmers, pig pastoralists have no connections with star hotels or middle standard hotels in Odisha for selling their stock.

There is a total production of about 5000 metric ton of pork in the state.

Trends in Pig Pastoralism - As per the census conducted by Department of Animal Husbandry and Veterinary Services, Government of Odisha ,there were almost 5, 69,533 numbers of pigs present in the state during 17th census of 2003 and 18th census of 2007 recorded 3,59,390 numbers of pigs with decrease in population number of 2,10,143 pigs in total. There is decrease of 36.9% in pig population in 2007 census than in 2003 in the state. This substantial decrease in pig population is observed in the district of Keonjhar(-50.62%), Sundargarh (-40.95%), Dhenkanal (-43.06%), Nowrangpur(-75.71%), Mayurbhanj (-68.17%),Koraput (-43.77%), Balsores (-82.75%) and Bhadrakh (-76.60%) ,where there is increase in industrialization activities like mining, quarries, establishment of iron and steel plants and other allied activities , those have taken place in last decade. A record increase in pig population is recorded during 18th census in the district of Ganjam (+109.41%) and Sonepur (+249%) and marginal increase in the district of Gajapati (+7%) and Boudh (+9%) where there is no industries at all or industrialization has not taken place in recent past. (*Census of pig in Annexure-1*)

Causes of this negative trend in pig population may be mostly contributed to large scale mining activities in tribal and other districts as well as decrease in the pasture land in the state.

Hazards faced by pig pastoralists- Pig pastoralists always complain that they get threats from local inhabitants. Particularly inhabitants of towns, semi urban and urban places threaten them for the filth/burrow pigs make in the soil and dung heaps present around their houses. Farmers in rural areas always caution pig pastoralists and get their movements restricted to pasture lands only. In recent pasts after the news of swine flu came in, not knowing the causative agents and hosts for the disease, people in general threaten pig pastoralists. There are news of pig pastoralists being bitten by the public for the rumors that pigs spread “swine flu” to humans. But later on, clarification from Government Health and Animal Husbandry department, in local news papers, situation became better.

Nomadic pig pastoralists face more threats from local people, because of their nature of movement. Many times they are treated as thieves by the localities, because of their quite and hither –thither movement- says Natha Patra of village Bartani in Kendrapada district. If any incidence of robbery, stealing happens in the locality, people suspect us first for these act, which is a biased perception of the upper caste people against us, says Sri Patra.

Pig Pastoralists, “Pathe Paathshaalaa” and Telemedicine - Most of the pig pastoralists belong to lower castes. They are eccentric and at the same time emotional. Mostly the nomadic pig pastoralists lead a secluded life with little of socializing. This happens due to the social barrier they receive from the society. Their life style, wants, knowledge towards the modern world are studied through many “Pathe Paathshaalaa”- the moving schools conducted for them. “Pathe Paathshaalaa” or the road side moving school could reveal their knowledge on traditional pig rearing and ignorance on new developments .It also revealed their kin interests in knowing new knowledge on pig rearing, which they are not getting

because of their life style and prevailing social status. Particularly young pastoralists want to know more on recent skills like availability of vaccines against dreaded diseases such as Hog Cholera, FMD and Hemorrhagic septicemia and vaccine administration. Looking to their quests for knowledge, “Pathe Paathshaalaa” is conducted by Dr Balaram Sahu and peers in Innovate Orissa Initiative, Bhubaneswar in different regions of the state to create awareness on vaccination; low external input based herbal treatment for their sick animals, forest right act and how their

contribution for society in terms of eco-conservation and supply of acceptable and cheap animal proteins is important



. Demonstration in Pathe Paathshaalaa on herbal preparation.



“Pathe Paathshaalaa”-The moving school for pig pastoralists in village Tangi Bhansar in Puri district

There are huge responses from the pastoralists to know more on traditional herbal healing and vaccines. Advent of mobile phones has now made them to be articulating with other herders and market persons. “Pathe Pathshaalaa” in different parts of the state has taken initiative to exchange mobile phone numbers of among pastoralists those who remain in different regions of the state. Some good results have come up in regards to exchange of boars, pork marketing, disease occurrences and vaccines availability through mobile connectivity.



“Pathe Paathshaalaa”-The moving school for tribal pastoralists in village Khatkurubahal



“Pathe Paathshaalaa”-The moving school with Christian pig pastoralist in village Latagaon of Sundargarh district



“Pathe Paathshaalaa”-The moving school with “Gonda” pig pastoralists

“Pathe Paathshaalaa” also gives them training at their place on preparation of herbal medicines using local herbs against ailments like wound healing, respiratory distress, FMD lesion healing etc. After some classes of “Pathe Paathshaalaa”, telemedicining on pig health problems have begun with Dr Balaram Sahu at one end and pastoralists in other end.

Traditional knowledge of pig pastoralists-

1. In case of external wounds leaves of bitter gourd is used. Generally fresh leaves are plucked and ground to paste. The paste as well as the juices is applied on the wounds, two times a day. Wounds due to injuries, FMD, vesicular exanthema are also quickly healed up by this herbal regimen.

2. In case of cough and respiratory distress, bark of “sunari” plants (*Cassia fistula*) are ground to paste and given orally with rice. This regimen is given two times a day for 3 days. This works wonderfully against cough and respiratory distress.

3. In tribal district of Sundargarh pastoralists uses Ginger, Turmeric, Black pepper and leaves of bitter gourd are given orally, two times a day for 3 days

Ginger-50gm

Turmeric-50gm

Black pepper-20 no

Bitter gourd leaves-2 handful

All above ingredients are ground together and give orally at one time, two times a day for 3 days.

4. The residue of rice fermentation, for preparing alcohol is locally called as MERA. This is very much liked by pigs and is given as growth promoting factors. It helps in fattening of pigs.

5. In case of pox and FMD in pigs, pastoralists use juice of *Aloe vera* to heal the lesions produced by the disease on the body and hoof respectively. Pastoralists also offer a cup of *Aloe vera* juice to each animal once a day for 3 days. This works both as preventive and curative.

6. For treating maggot wound, leaves of stone apple (*Annona squamosa*) are ground to paste and applied on the wound. This heals wounds very first and ward off maggot.

7. For fever pastoralists offer leaves and branches of Bhuin Nimba (*Andrographis paniculata*). A handful of leaves and branches are fed to the animals along with rice. This is offered once in a day for 3 days.
8. To prevent diarrhea, pastoralists take leaves of guava or bamboo along with catechu. Usually they take 3 handful of leaves and 5 grams of catechu and ground to paste and offered to the animals. This is offered once a day for 3 days.
9. When there is bleeding from an injury or wound or any body parts pastoralists apply juices from Bermuda grass (*Cynodon dactylon*). This stops bleeding in minutes.
10. For increasing milk in sows, oilcake from groundnuts is offered every day for a month. These oilcakes are soaked in water and mixed with rice and fed to the animals. This increases the vitality of sick animals also.

Conclusion- Pig pastoralism is an age old practice in Odisha. As it is present with the lower caste and poor people, it serves them in many ways. If one looks to the life style, socio-economic condition of pig pastoralists and food requirement by pigs, pig pastoralism provides many advantages to livestock keepers in Odisha. These are

1. Pigs are the food basket of lower castes, tribal and landless poor those who remain in rural areas.
2. A herd of pigs is just like a granary for the poor people.
3. It acts as a bank account for poor which fetch them money at the time of need.
4. Pig pastoralists need no land of their own, as they rear pigs by moving in common property resources.

5. In face of climate change and consequential failure in crop husbandry, pig rearing works like a food reserves.
6. Pork is the cheap source of animal protein for poor, expecting mothers and disadvantaged people of the society.
7. Pig pastoralism is a low external input based lively hood,
8. Among all domestic animals, pig can only convert all the organic garbage to meat.
9. Native breeds of pigs are more disease resistant than exotic breeds. Hence rearing of native breeds of pigs should be promoted.
10. Pig pastoralism is pro women and pro poor practice by which poor village women can be empowered.
11. Pigs are prolific breeders, hence more profit making and more paying than any livestock rearing.
12. Pig pastoralism is almost the monopoly of lower caste people in Odisha and it helps them to have easy access to cheap animal protein and fight protein hunger.
13. Pigs are natural scavengers, environment cleaner and eco maintainers.

But, in recent past, increase in industrial activities like mining, queries, setting of at least 50 and odd numbers of small, medium and large scale iron and steel plants in tribal and backward areas as well as coastal districts of Odisha have come heavily against pig pastoralism, as evidenced from government census report. Acquisition of government and grazing land by big industrial houses has added to the problems in big way. All these activities have shrunken the "Food Basket" of poor.

ANNEXURE-I

Pig Census of Odisha year 2003 and 2007

		TOTAL PIG 2003	TOTAL PIG 2007	Change Population Number	in	Change in %
1	Anugul					
2	Balangir	5153	4316	-837		-16.24
3	Balasore	2608	1443	-1165		-44.67
4	Baragada	18235	3145	-15090		-82.75
5	Bhadrak	6184	3517	-2667		-43.13
6	Boudha	8396	1965	-6431		-76.60
7	Cuttack	1294	1420	126		9.74
8	Debgada	2165	1604	-561		-25.91
9	Dhenkanal	5477	4859	-618		-11.28
10	Gajapati	2457	1399	-1058		-43.06
11	Ganjam	24824	26641	1817		7.32
12	Jagatsingpur	9895	20721	10826		109.41
13	Jajpur	5601	4278	-1323		-23.62
14	Jharsuguda	5826	2880	-2946		-50.57
15	Kalahandi	5676	4313	-1363		-24.01
16	Kendrapada	6396	11280	4884		76.36
17	Keonjhar	2099	1368	-731		-34.83
18	Khurda	26310	12992	-13318		-50.62
19	Koraput	2713	1694	-1019		-37.56
20	Malakanagiri	51382	27065	-24317		-47.33
21	Mayurbhanja	60173	43291	-16882		-28.06
22	Nuapada	80902	25751	-55151		-68.17
23	Nawarangapur	1575	1115	-460		-29.21
24	Nayagada	29202	7094	-22108		-75.71
25	Kandhamal	54	46	-8		-14.81
26	Puri	2039	1123	-916		-44.92
27	Rayagada	37643	26290	-11353		-30.16
28	Sambalpur	20065	12924	-7141		-35.59
29	Sonepur	963	3362	2399		249.12
30	Sundargada	97918	57823	-40095		-40.95
		569533	359390	-210143		-36.90

(Source : Department of Animal Husbandry and Veterinary Services, Govt. of Odisha)