sProceedings of the Expert Consultative Workshop

on

Management of Gazani in the Aghanashini Region held on 27-12-22 at the Rotary Hall in Kumta

Total participants: around 35 Gazani farmers

Mr. Vasanth Hegde, Dy. Director of Fisheries, Tadadi harbor, Kumta

Mr. Ravindra Talekar, Dy. Director of Fisheries, CRZ,

Mr. Chandrashekhar, Asst. Director of Fisheries, Kumta.

Mr. Prasanna Patagar, DCF-CRZ, Kumta

Dr. VN Nayak, Retired Professor, Marine Biology, Karwar

Dr. Subhash Chandran, Retired Scientist.

Dr. Ramachandra Bhatta of Snehakunja Trust, Honnavara, welcomed the participants and suggested that the workshop be interactive rather than lectures, and requested the farmers to first share their experiences of Gazani cultivation and issues related to the ecosystem. He also mentioned that we need to emphasize the new amendments by the National Green Tribunal (NGT) for proper implementation. Other issues to be discussed could include implementation of tourism in the eco-sensitive areas of Gazani.

Farmer 1.

Gazani cultivation has become unviable. Sluice gate (ಕೋಡಿ) is not functioning properly. Maintaining canals (ಕಾಲುವೆ) is difficult, and would need earthmovers to repair and maintain canals and bunds (ಏರಿ/ಒಡ್ಡು/ಬದು). Maintenance of gazani structure cannot be done with manual labor due to high costs and low efficiency.

Farmer 2, Shri. Shreedhar Pai, Manikatta gazani.

Have 40 acres of Kagga (paddy grown in Gazanis) cultivation in the Gazni. Got seeds from MS Swaminathan Research Foundation last year. Got only 1.25 quintals of yield due to bird foraging in flooded/inundated paddy fields. There are no canals, and there is siltation in paddy fields. In rainy season water does not drain out. We cannot put our labor for that. There is heavy crop loss. When tides come birds eat away crops. There is finally no return on investment.

Commented [PS1]: But in my notes, I have it as "own source".

Farmer 3, Shri. TK Patagara, Kimmane gazani.

No canals in our Gazani of 2 acres and 26 guntas. There is no fencing or bund, and the sluice gate needs to be repaired. We are only growing prawns in small quantities. Fencing and bund need to be developed in the gazani.

Commented [PS2]: Not sure.

Farmer 4 Shri. VR Patagara, Kaagal.

Find hard to grow paddy. Have 21 acres of Gazani. Got earthmover for canals. Built platforms through self-financing. Salt water needs to be prevented from flowing in. We can preserve Kagga only by coming together. Need government support for this. I have spent more than what I have earned. That is why people are losing interest in cultivation.

Farmer 5, Shri. CM Patagara, Retired Agricultural Officer.

About 6,000 acres of gazani land is available in Kumta. Cultivation of Kaggalakki (i.e., the Kagga rice) has become difficult due to many reasons which the previous speakers highlighted. These include improper construction and maintenance of bund, canals, and sluice gates of the gazani. Most canals are extinct now. Need good technology for construction of Bunds. Making of bricks from the gazani soil is possible. In Kolkata there is an interesting technology. If this can be implemented one can combine shrimp and Kagga paddy. They are complementary to each other. Bund construction is expensive. Cannot be done even with programs like NREGA with manual labour. Size of paddy has decreased over the years due to improper water management. Excess salinity as well as very low salinity are both not preferred in gazani. Shrimp farming production in the gazani would improve only if paddy crop precedes it.

Also, there is a need for price support for Kagga. Market price is good, but for every successful paddy crop there could be 4-5 crop failures in gazani paddy farming. The government should insure against crop loss and provide insurance in case of crop loss after seeding. This insurance should be linked to the realized yield, and not an insurance based on climate index. If this is done around 3000 acres of land could be cultivated with Kagga in the area.

Farmer 6, Shri. Marappa, Hegade gazani.

590 acres of low-lying gazani land is available. Water does not pass through in rainy season. Due to this there is heavy crop loss. Paddy seed quality is poor. There are conflicts between fishers and farmers, but proper bunds and fencing can prevent such conflicts. Some government policies are also problematic.

Farmer 7, Shri. Nagaraj Naik, Kaagal.

I have 3 acres of land and leased another 3 acres. Have experimented with different varieties right in front of my house. I cultivated 120 different native varieties of paddy crop in the limited land resources available with me, including the Kagga varieties. Kagga paddy takes about eight days to germinate, whereas other paddy varieties take about three days. Pests, birds, and wild animals eat away about 40 percent of the paddy, and only 60 percent remains for harvesting. Kagga is very healthy. My grandfather survived for 106 years, and he was a regular consumer of Kagga. In the olden days, paddy farming used to be done during the June to October window, and then shrimp farming was done. But now, the duration of shrimp farming has increased, affecting the land available for paddy cultivation. Also, shrimp farming involves applying various chemicals such as bleaching powder, medications etc., that impair the soil quality in the Kagga field. We face marketing problems. Market is not accessible all through the year. Milling facility for small scale is not available. It has minimum capacity which is not conducive for small scale milling if needed. Difficult to make seeds. The Kagga rice needs to be given the Geographical Indication (GI) tag.

Farmer 9, Shri. Vittal

Fish yield is reducing. Need to focus on yield of fish. Traditionally important fish varieties are not available in good quantities. There is not much growth in inland fishing. Need to treat inland and marine fishing separately. There are policy constraints. Karnataka Mariculture Policy should be brought out. Open ocean cage farming needs to be promoted by demarcating specific areas in the sea for mariculture. Pradhan Mantri Matsya Sampada Yojana (PMMSY) is available.

Farmer 10, Shri. Raghuveer Nayak, Kaagal,

I run a salt works of about eight acres in the Aghanashini banks. There are unseasonal rains. There is water leakage from gates. Need proper water management policy. We have given complaints to respective departments.

Farmer 11, Shri. Arun Nayak, Mosalesaalu island in Kaagal.

Have 36 acres of land in our Gazani. We grew paddy about thirty years back, but in recent years we leased the land for shrimp aquaculture and natural farming. We are running salt works, but it is affected by changing water salinity due to leakage from shrimp ponds. But salt prices have also declined. So, we wound up salt production and ended up leasing the land for shrimp farming. There is no other place top prepare salt in Karnataka. This should be promoted by government. This salt is nutritious and healthy.

Farmer 12, Dr. VN Nayak

There is a National Green Tribunal order. 500 crores have been sanctioned by the government for construction of Bunds, but improper construction has created many problems in water flow. It is essential to bring farmers together. Need common bunds, for which farmers need to come together. As per the NGT order we need to get back to traditional shrimp farming. There is high uncertainty with Kagga yields. Both low rainfall and excess rains can create problems for Kagga. No assurance of quality of Kagga seeds. Need to have combined buffer stock of Kagga seeds for conservation of varieties. Genetic technology can be used to introduce salt-resistant genes into normal paddy varieties. Need insurance for crop loss. No insurance by companies so far. Mud crab farming is profitable (*Scylla oceanica* fetches ₹3000 per kg, compared to *Scylla serrata* ₹700 per kg). Seabass (*Lates calcarifer*) can be farmed under various salinities from freshwater to sea water.

Shri. Prasanna Patagara, DCF-CRZ

Tadadi port expansion plan has been dropped by the government. Govt has given 300 crores for construction of bunds. No new bunds are created. 99% of funds go for repair of old bunds. There are proposals for creation of bunds through gram panchayats. Farmers need to discuss at the Grama Panchayat level to properly construct bunds.

It is essential to diversify crops in the region. Not good to grow only Kagga. Mangroves are also to be retained. They help in protecting the ecosystem of the region. It may be possible to cover the Kagga crops with insurance if the farmers form collectives.

There is an NGT order which needs to be taken into account when permitting for coastal aquaculture. Farms need to be registered. Only 350 registrations so far. But many are unregistered. You need to obtain MPEDA certification.

Dr Subhash Chandran

Aghanashini estuary has potential to receive recognition of a Ramsar site. This is a fragile ecosystem, and its management can take inspiration from the Ashtamudi estuary of Kerala, another Ramsar site. There is a proposal by central government. It is an international recognition. If this comes then we need to produce a 5-year integrated management plan. Mangroves are the nursery of a variety of fishes inhabiting the sea, and therefore they should be protected. 200-300 metric tons of carbon is sequestrated by mangroves.

Dr. Narasimha Hegde

Climate change (warming) may lead to loss of crop area in many parts of Uttara Kannada for Black Pepper, mangoes etc. Nature-based solutions. Carbon market*s can be developed using* voluntary and mandatory mechanisms for the mangrove and Gazani ecosystems.

Shri. Vasanth Hegde.

Aghnashini has given a lot of employment opportunities.

There are many constraints. Oxygen cylinder was not available to bring the fish seedlings.

Kagga and fish are very interrelated. Chandrika fish is very unique to this region.

Need concrete above the bunds. You can do fish drying there.

Farmer

Can jute be grown in the region like in the case of Sundarbans in west Bengal. Can this be explored?

Shri. Narayana K

Aghanashini is a high productivity area for fishing. Native varieties of fishes are dying due to going for other varieties.

Mangroves are problematic. Need maintenance. Cannot be planted everywhere.

Local variety of fish to be promoted.

West Bengal received UNDP funds for promotion of the eco system. Can we attract that?

It needs a holistic approach for Kagga cultivation.

Main problem is there is no unity among farmers. Need some union and co-ordination across the departments as well.

Cage cultivation is practiced in Aghanashini. There is lot of scope for this in rivers and sea.

Cage cultivation is expensive and capital intensive. But it is profitable.

Need support from government.

Farmer…..

Problem with the revenue department.

We are samuhika Gazani.

This is a problem

No private incentive due to no clarity in Land records.

This has to be worked out. We need proper RTC in our names. I will not cultivate if the land is not in my name.

Mangroves have become our enemies. Government should permit us to remove the mangroves.

Response of Shri. Ravindra Talekar, Fisheries CRZ officer

Cage culture is covered under PMMSY. It is now promoted. Though it is a recent development in India.

Mariculture policy is in the draft.

It would cover more on cage fishing. Which place to put the cages? How many cages in a location etc will be covered. Government has proposed the fees and licenses for this.

Research is going on to arrive at mariculture policy. It is then easy to regulate.

CRA act and CRZ notification are conflicting. This is creating confusion for us.

Insists upon farmers to register for aquaculture by producing whatever records they have.