

Potential Good Practice Note

Reviving the Indigenous Poultry Breed - *Kadaknath*



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DISTRICTS : Barwani, Dhar & Jhabua

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Reviving the Indigenous Poultry Breed - *Kadaknath*: Enhancing Livelihoods of Tribals Through *Niche* Market Opportunities (Based on the experiences of MPRLP and BAIF)

Authors: R.K. Pathan, A.R. Bhide, D.V. Rangnekar, J.D. Ambekar

Reviewers: Lucy Maarse, B.R. Patil

Contributors: Krishnakumar Sen, Sandeep Khanwalkar, Radheshyam Jat, Vinod Shukla

Content Editors: Mamta Dhawan, Sheila Koyyana

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1. Introduction

Backyard poultry keeping is practiced by majority of the poor and marginalized rural households all over India. These households rely on low cost backyard poultry rearing to supplement and enhance their livelihoods. It not only provides nutritional security but also reduces the livelihood vulnerability, and promotes gender equity (Dolberg, 2004; Ahuja, 2004; Ahuja and Sen, 2007). Although income in monetary terms from backyard poultry farming is negligible, fe/male farmers continue to keep poultry for socio-cultural and religious reasons (Ahuja et al 2008). For the past three decades focus has been on commercial poultry farming and India has without doubt made progress at an astounding pace reflected by being the fifth largest egg producer and eighteenth largest producer of broiler, (Mehta R., 2002),. However in this transformation from backyard poultry to commercial poultry farming, indigenous poultry have got neglected in favour of exotic poultry breeds that may have high production characteristics but also need high inputs both in feed and management, which are not necessarily suitable to the rural context or pro-poor.

The general perception that indigenous birds are not an economically viable livelihood option is now being questioned by evidences available from various sources¹. India has 20 recognized indigenous poultry breeds which have sustained so far through community efforts with very few, if any, external interventions. However, lack of animal health delivery system, disease outbreaks and increased consumption has led to decrease in indigenous poultry population from 50% of total poultry population to 10% within a span of 30 years. (Rangnekar and Rangnekar, 1999). It is only recently that the Government of India has recognized the potential of small-scale poultry sector development for poverty reduction (GOI, 2005; 2008). **This Note presents a government initiated project to promote and introduce, in new areas, indigenous backyard poultry - *Kadakhnath* for both bio-diversity conservation and livelihood generation that can successfully enable tribal poultry rearers to reap financial benefits and as well as maintain their poultry heritage.** Although this project is fairly new and hand holding by implementing agency continues, a number of lessons learnt can help in more successful replication in future so that it may become a sustainable community led initiative.

¹<http://sapplpp.org/goodpractices/small-holder-poultry/SAGP25-unpacking-the-poor-productivity-myth>

2. Background

Kadaknath is a native breed of poultry inhabiting Jhabua and Dhar districts in Western parts of Madhya Pradesh. The Jhabua District's mean altitude ranges from 450 to 700 m above mean sea level. The climate is hot and the temperature varies between 10°C to 43°C. The area gets an annual rainfall of 500 to 1,000 mm. The *Kadaknath* has been reared by tribals over a long period of time and its unique breed characteristics have been established through many generations of selection and fixation of genes. It tolerates extreme climatic conditions of summer heat and cold winter stress and thrives very well under minimal management inputs like poor housing, no health care or supplementary feeding while exhibiting appreciable degree of resistance to diseases compared to other exotic breeds of fowl (Thakur et al 2006). The *Kadaknath* lays around 80-90 eggs annually and is not a good brooder. However its dark coloured meat is considered a delicacy and is also attributed with medicinal qualities much sought after by the tribal. It is locally known as *Kalamasi*² and is used for the traditional treatment of many diseases in human beings and is also considered an aphrodisiac. However, no proper scientific evaluation endorses this claim. The above mentioned reasons make *Kadaknath* birds comparatively expensive and much aspired for. The meat and eggs are also reckoned to be a rich source of protein (Rao and Thomas 1984).

Box1

Characteristics of *Kadaknath* Poultry Breed:

- Black coloured meat
- Black Blue plumage
- Black hued internal organs
- Body weight at 20 weeks (g) 920
- Body weight of adult cockerel 1.5 -2kg
- Body weight of adult hen 1-1.5 kg
- Age at sexual maturity (days) 180
- Annual egg production (number) 105
- Egg weight at 40 week (g) 49



The skin, beak, shanks, toes and soles is dark gray coloured, whereas tongue is dark gray or light black in colour. Comb, Wattles and earlobes are light to dark gray or have purple hue. Most of the internal organs of the *Kadaknath* breed show intense black colouration due to the deposition of melanin pigment in the organs (Rao and Thomas 1984). The three main varieties of *Kadaknath* breed are:

- ◆ Jet black - The Jet black adult males and females are black in colour
- ◆ Pencilled - In Pencilled variety, adult male and female plumage is black with white feathers on neck
- ◆ Golden - The Golden adult male and females are basically black in colour with Golden feathers on head and neck, (Thakur et al 2006).

Source: <http://www.icar.org.in/cari/native.html>

²Black coloured meat

3. The Practice

Over a period of time introduction of exotic birds like Rhode Island Red, Australorp etc under various rural development programmes undertaken by the Government in the home tract of *Kadakhnath* led to indiscriminate breeding and resulted in loss of pure *Kadakhnath* birds. The policies that encouraged rearing of high yielding genetic stock as well as regular outbreaks of Ranikhet disease has brought this breed on the verge of extinction. Presently pure *Kadakhnath* birds can be found only in Jhabua district of Madhya Pradesh and in the two government owned poultry farms (Jhabua and Bhopal).

In 1982, the Animal Husbandry Department of Madhya Pradesh established a breeding farm and hatchery in Jhabua district with the objective to conserve and propagate this breed in and around the district keeping in view the impending extinction of the bird due to heavy demand for both meat and religious reasons. Later Madhya Pradesh Rural Livelihoods Project (MPRLP)³ joined hands with BAIF⁴ to provide *Kadakhnath* chicks to poor households to enhance livelihoods. To promote *Kadakhnath* in areas other than Jhabua it was decided to select a neighbouring district- Barwani which has similar agro-climatic conditions.

| Year | Scheme | Beneficiaries |
|-----------|--|---|
| 2004 - 05 | | Ten members of Kalawati SHG in village Mindal, block Jhabua |
| 2005 - 06 | Promotion of <i>Kadakhnath</i> poultry units in SGSY groups through joint scheme of <i>Jila</i> Panchayat Jhabua and Animal Husbandry Department | 100 beneficiaries of 10 SHGs of 10 blocks of Jhabua district |
| | | 30 beneficiaries of Block Meghnagar |
| 2006 - 07 | | 30 beneficiaries (20 of Sajjangarh and 10 of Kushalgarh village) of Banswara block of Rajasthan |
| | Madhya Pradesh Rural Livelihood Project | Various units in Dhar, Jhabu, Badwani and Alirajpur |
| 2007 - 08 | Support to beneficiaries financed through nationalised banks | Ten beneficiaries from Gelar village of Jhabua block |
| | Promotion of <i>Kadakhnath</i> poultry units in other districts | Beneficiaries of Betul and Chhindwara (M.P.), Bastar and Jagdalpur (Chhatisgarh) |
| | Madhya Pradesh Rural Livelihood Project | Various units in Dhar, Jhabua, Badwani and Alirajpur |
| 2008 - 09 | Backyard Poultry Scheme by State Government | Due to Start |
| | ' <i>Kadakhnath</i> Yojna' by Central Government | Proposed for 500 beneficiaries of nine blocks of Jhabua |

³ M.P. Rural Livelihood Project is an initiative of the Government of Madhya Pradesh, Panchayat and Rural Development Department and supported by DFID. For details visit: <http://mprlp.in/> 500-2000 chicks are raised
⁴BAIF Development Research Foundation

The Area, the People and their Farming Systems

Barwani District is situated on the western border of Madhya Pradesh bordering the State of Gujarat. 67% of the total population of the district is tribal and the main tribes are *Barela, Bhilala, Pataliya and Bhil*. The literacy rate is 41.5% and majority of the households belong to the Below Poverty Line (BPL) category. The district has undulating semi-arid topography with temperature ranging from 10 to 49 degree celsius. It gets an average rainfall of 772 mm and has very limited irrigation facilities. Major sources of livelihood are agriculture, livestock and wage-labour. Migration in search of work as agriculture labour in the adjoining districts of M.P. and Gujarat is rampant. Average land holding of tribal households is about two acres and rain-fed agriculture with mixed farming, crop-livestock-backyard poultry is practiced. Maize, chilli, soybean, jowar and cotton are the commonly cultivated crops in all of the available land with no land left fallow. In addition to crops, livestock and backyard poultry make major contributions to livelihoods of tribal households. Most tribal households possess about five goats, eight to ten non-descript (*Desi*) birds, local cows (one adult and one calf) and a pair of bullocks.

Almost all the tribal households rear backyard indigenous poultry and this activity is the domain of women. Poultry has a multiple role in the lives of tribal households ranging from economic and nutritional security to socio-cultural aspects. The average composition of the flock is one cock, three hens and six to eight chicks. The birds are maintained in a free-range system where they search for grains and insects during the day and a fistful of grains like crushed jowar (millets) or maize is offered once or twice a day. Woven bamboo baskets are used as night shelters for protection against predators. Water is offered in earthen, wooden or tin containers. Although the *Desi* poultry has been reared for ages, losses were found to be high with approximately 40% eggs either infertile or damaged. Moreover 30 - 35% of chicks are lost due to disease and predation. Ranikhet disease is suspected to be the major cause of mortality. Outbreaks of this disease occurs almost every 2nd or 3rd year and most flocks get wiped out. However, most households start keeping the *Desi* birds all over again by purchasing a few chicks / birds – indicating the importance attached by tribals to backyard poultry.

Kadakhnath bird commands an elevated position since a year old *Kadakhnath* bird fetches Rs. 250 to 300 and the eggs are sold at Rs. 4 to 5 – depending on season and location. Due to high demand for *Kadakhnath* meat and the virtual absence to promote its rearing, the population of birds has reduced drastically and is on the verge of extinction. Reasons for preferring adoption of *Kadakhnath* bird, as indicated by tribal households (their perceptions), are summarised in Table 1.

| S. No. | Variables | | <i>Desi</i> | <i>Kadakhnath</i> |
|--------|------------------------------|-----------|---------------------------------------|---------------------------------------|
| 1 | Market Price (Rs) | 6 months | Cockerel: 80 - 90 Hen: 70 - 90 | Cockerel: 100 - 150 Hen: 90 - 100 |
| | | 12 months | Cockerel: 150 - 200 Hen: 120 - 150 | Cockerel: 250 - 300 Hen: 150 - 250 |
| 2 | Annual Egg Production | | 40 - 60 | 80 - 90 |
| 3 | Egg Spoilage during Hatching | | 25 - 30% | 20 - 25% |
| 4 | Size of Egg (Grams) | | 28 - 40 gm (average 32.66) | 32 - 46 gm (average 40.66) |
| 5 | Price of Egg (Rs) | | 3 - 4 | 4 - 5 |
| 6 | Colour of Egg | | Light Brown | Dark Brown |
| 7 | Tenderness of Meat | | Hard | Soft and Lean |

Origin of the practice

Situation analysis of livelihood/farming system was carried out by MPRLP through a study and series of meetings at Hirakray cluster of Silawad Block of District Barwani. Informal meetings were organised between the Gram Sabha and the hamlet to discuss possible options for economically weak households for sustainable livelihood development. Some households that were involved in traditional/backyard poultry production as an adjunct to labour wages and were aware of premium price of *Kadakhnath's* meat and eggs, strongly suggested that they would like to keep this bird but needed support in the initial stages (chick purchase and health control). Since the tribal of Hirakray village in Barwani district were comfortable with rearing poultry and chose it over other livelihood options that were alien to them, MPRLP decided to assist these households in their efforts to rear *Kadakhnath* birds as one of the activities for livelihood improvement. They hired poultry consultants who advised an intensive system where 100 birds would be reared to be sold after 6 months and this required inputs in form of shed, commercial feed, health coverage etc. (Box 2) Beneficiaries were chosen by the Gram Sabha and BAIF was selected as the implementing agency. *Kadakhnath* chicks were obtained from the breeding farm and hatchery of the Department of Animal Husbandry at Jhabua.

Box 2: Amasya- The Pioneer Farmer of Village Hirakray (Case Study)

During the introductory meetings in the village of Hirakray, Cluster Silawad, Block / District Barwani, it was observed that some of the economically lower graded families did not have any option for sustainable livelihoods. Amasya put an idea that *Kadakhnath* rearing may be useful with a high market value if it survives. The challenge of survival of the bird *Kadakhnath* in the district was taken up by the resource agency-BAIF'. The interested farmers were taken to Jhabua for technical training and exposure visit. Based on the interest shown, a market plan was made and proposal was put up in the Gram Sabha (the lowest body of PRI system). Once the proposal was passed and finances received through Government scheme, a poultry shed was prepared on Amasya's land and he contributed by providing labour. Now the entire village and the PFT were ready to witness the arrival of the black bird.

On the eve of New Year 2007, 300 chicks along with their required feed landed at Silawad, from *Kadakhnath* farm,

Jhabua. Since Amasya's requirement was for was only 100, rest went to for the other beneficiaries. Due to winter stress, 15 chicks died within three days. The resource agency decided to go in for an intensive care unit in the form of brooding pen to save the remaining chicks. The chicks were provided with proper light, feed, vaccine, medicine etc and as a result all 85 chicks survived to grow as birds. They grew well on Amasya's farm and their sale price was almost the double of Desi birds. On an average the weight of a bird was between 1-1.5 Kg to be sold at a minimum of Rs. 300/- each live bird. Moreover the purchasers came to Amasya farm to procure *Kadakhnath* bird for table purpose. Amasya's success with *Kadakhnath* got neighbouring villages interested in this venture and the PFT organised exposure visits to Amasya's farm. A number of farmers came forward and started rearing *Kadakhnath*. The challenge of making the breed take roots in a new area has successfully been met with sincere efforts of the team and encouraging participation of the community.

| Cost benefit Analysis of Amasya's <i>Kadakhnath</i> unit of 100 Birds | |
|---|------------------|
| Capital Cost - Shed Construction 60 x 20 ft | 14,000.00 |
| Recurring Cost | |
| ☞ 100 chicks (25 days old) @ Rs 25 per chick) | 2,500.00 |
| ☞ 3 quintals company feed | 3,600.00 |
| ☞ 3.5 quintals home feed | 3,100.00 |
| ☞ Medicines | 300.00 |
| Total Recurring Cost | 9,500.00 |
| Income - A} From Birds (Mortality 15 birds) | |
| ☞ Sale of 7 birds after 5 months @ Rs 150 per bird | 1,050.00 |
| ☞ Sale of 22 birds after 6 months @ Rs 300 per bird | 6,600.00 |
| ☞ Sale of 36 birds after 7 months @ Rs 300 per bird | 10,800.00 |
| ☞ Sale of 10 birds after 8 months @ Rs 300 per bird | 3,000.00 |
| ☞ Home Consumption (10 birds @ Rs 300 per bird) | 3,000.00 |
| Income - B} From Eggs | |
| Total Eggs Produced: 70 | |
| ☞ Sale of 40 eggs @ Rs 3 per egg | 120.00 |
| ☞ Home consumption 30 eggs | 90.00 |
| Total Income [A + B] | 24,660.00 |
| Net Profit [24,660 - 9,500] | 15,160.00 |

Management Systems followed by Tribal Farmers adopting Kadaknath bird

Initially units of 100 *Kadaknath* chicks were given to beneficiaries as a livelihood enhancing tool where the rearer would grow them to the wt of 1 kg in 6 months and make sales thereafter. To house these birds a shed was constructed using stones, corrugated sheets and tiles costing around Rs 12 - 15,000. The finance for this was linked to various government schemes like SGSY (Swaranjayanti Gram Swarojgar Yojana), ITDP (Integrated Tribal Development Project) etc facilitated by MPRLP. It was soon realized that semi scavenging system with supplementary feeding would be more appropriate and profitable as Feed Conversion Ratio of this bird is high even under intensive system.

Once the *Kadaknath* established itself in the new area, a number of Tribal farmers took up this activity and began rearing smaller flocks (even a pair) of *Kadaknath* as they were rearing *Desi* birds. They have adopted traditional free range scavenging system since the bird thrives outdoors and feed costs are also reduced when they are allowed to scavenge. Both *Kadaknath* and *Desi* birds scavenge around the farm and are offered a handful of grains once or twice a day. Grain offering is also useful in calling and gathering birds in the evening to be put in the shelter. Most frequently used shelter comprises of a large woven bamboo basket, while in some cases the *Kadaknath* are housed in wooden boxes or in the store rooms. For gathering of eggs the women and children have to be watchful and look around the house since unlike the *Desi*, *Kadaknath* birds do not lay eggs at a fixed place.

In order to reduce losses due to disease outbreaks, preventive measures in form of timely vaccinations were introduced to the fe/male *Kadaknath* poultry keepers by the Gopals⁵ employed and trained by the Department of Veterinary Services under the MPRL Project and further guided by the SPESD. This major improvement in the management practice resulted in considerable reduction in losses. Since Gopals are also responsible for carrying out AI in large ruminants and are trained more to deal with large ruminants, suitable persons, preferably women, are being identified for training in vaccination of chicks. De-worming is another practice being followed as parasitic infestation (including coccidiosis) that prevails in the area is suspected to be the 2nd major cause of losses after Ranikhet Disease.

Production characteristics of Kadaknath birds

Kadaknath hens start laying eggs 6 months onwards. Eggs are laid in two to three clutches in a year with 25 to 30 eggs per clutch thus 80 to 90 eggs are produced in a year. Households from Hirakray cluster are keeping substantial number of eggs for hatching since presently there is a good demand for chicks thanks to the growing interest in rearing *Kadaknath* bird. However, hens of this breed show poor brooding ability and the eggs are, therefore, kept under *desi* hens for hatching- a traditional practice followed by tribals in this area. A bamboo basket is lined with crop residue of paddy / wheat or dried grasses to provide cushion for the eggs to be hatched. Eggs of both *Desi* and *Kadaknath* bird are placed on this cushion to be hatched by a broody *Desi* hen. This traditional technique is being encouraged by the Project Facilitation Team (PFT) to propagate *Kadaknath* through natural means to ensure availability of *Kadaknath* chicks at village level. 10 to 15% losses were reported at chick stage mostly due to predation. *Kadaknath* birds do not fatten and retain lean body conformation. Their meat is softer than that of the local *desi* bird – a characteristic preferred by local consumers.

⁵Self-employed Animal Health Worker

Marketing and economics of Rearing Kadaknath

Market demand and the premium price paid to *Kadaknath* bird are some of the main reasons for rural households adopting rearing of this bird – besides the fact that it can be managed under traditional scavenging system. The cockerels are sold at a premium price particularly during the festival season since it is the bird of choice for sacrificial offer to the Goddess. The fact that the households did not ever take either the birds or the eggs to market for sale as the products got sold from home confirms high demand for both meat and eggs. The price paid for the bird ranges between Rs. 100 to 120 for a six to seven month bird to Rs 250 to 300 for a year old bird and may go higher during the festival season. The eggs also fetch higher price compared to *Desi* eggs and much higher than the egg of commercial hybrid bird or broilers. The price per egg observed in the last one year ranged from Rs 3 to 5 per egg⁶. Another feature in favour of both *Desi* and *Kadaknath* birds is that the 'Sale of the bird at a particular age or weight is not critical, as in the case of broilers, in view of low external input-scavenging system'.

In view of encouraging results and increasing demand for rearing *Kadaknath* and also to extend the benefit

| Variable | | <i>Kadaknath</i> | <i>Desi</i> |
|---|-------|------------------|----------------|
| Number of Hens | | 1 | 1 |
| Average No. of Eggs laid in a Year | | 84 | 50 |
| Egg Spoilage (30%) | | 25 | 15 |
| Egg Consumption | | 20 | 15 |
| Total Loss + Consumption | | 45 | 30 |
| Chicks Hatched ⁷ | | 39 | 20 |
| Chick Mortality | | 6 | 5 |
| Chicks Survived | | 33 | 15 |
| Consumption of Birds | | 5 | 5 |
| Birds available for Sale | | 28 | 10 |
| Value of offspring at 12 months (considering 50% cockerel & 50% hens) | Cocks | @ Rs 250 = 3,500 | @ Rs 150 = 750 |
| | Hens | @ Rs 150 = 2,100 | @ Rs 120 = 600 |
| Total Income | | 5,600 | 1,300 |
| Expenditure | | | |
| Purchase of Hens @ Rs 200 per hen | | 200 | - |
| Feed | | 120 | 120 |
| Health Care Expenses | | 5 | - |
| Total Expenditure | | 325 | 120 |
| Annual Net Income | | 5,275 | 1,180 |
| <i>Estimated annual income to a Tribal family from 1 Kadaknath bird is around Rs 5,000.</i> | | | |

⁶Point to note is that the villages under the project were in a remote area, but due to Pradhan Mantri Gramin Sadak Yojana they are now accessible. This contributes immensely to the ease with which birds and eggs are sold.

⁷*Desi* hen may also be used to hatch eggs

to villages in the interior, the PFT and family groups (already formed in the villages) are organising marketing. This is a crucial step for extending and sustaining the benefit to tribal households of the block. Two approaches for promoting marketing have been discussed. One of them is that house-holds living along the roadside help others in sale of birds and eggs and some households have already started keeping other farmers' birds and eggs for sale. Other approach of organising collective marketing is being discussed as a strategy for future – anticipating increase in production and the need to exploit city markets (Badwani and Indore cities).

Stakeholders and their Roles

Key focus of the Madhya Pradesh Rural Livelihood Project (MPRLP), Govt. of Madhya Pradesh is on enhancing the livelihoods of rural poor in eight of the most disadvantaged districts in the state through regeneration of natural resources and capacity building of local communities, while aiming at implementation through the Gram Sabha. As it also facilitates the financial assistance/ convergence from the government schemes, it has provided financial support to this project.

BAIF (BAIF Development Research Foundation), is providing the technical support to the project through its associate organization namely Society for Promotion of Eco-friendly Sustainable Development (SPESD) a State level NGO. SPESD is implementing agency of the project at the field level through its Project Facilitation Team (PFT) at Silawad and Warla in Barwani district.

SPESD has established PFTs at village cluster level at the above locations that work closely with the resource poor families to augment their income, improve their quality of life and to strengthen village level bodies called Gram Sabha⁸ by ensuring that appropriate decisions are taken in the interest of the resource poor families. The Gram Sabha, along with the PFTs, identifies needy families that require provision of financial support for undertaking livelihood activities related to agriculture, livestock and micro-enterprises. Livestock rearing being an important source of income for the tribal families, improving their productivity is a critical area addressed by the PFT with the technical know how provided by SPESD as the Resource Organisation. On an average one PFT covers about 15 villages.

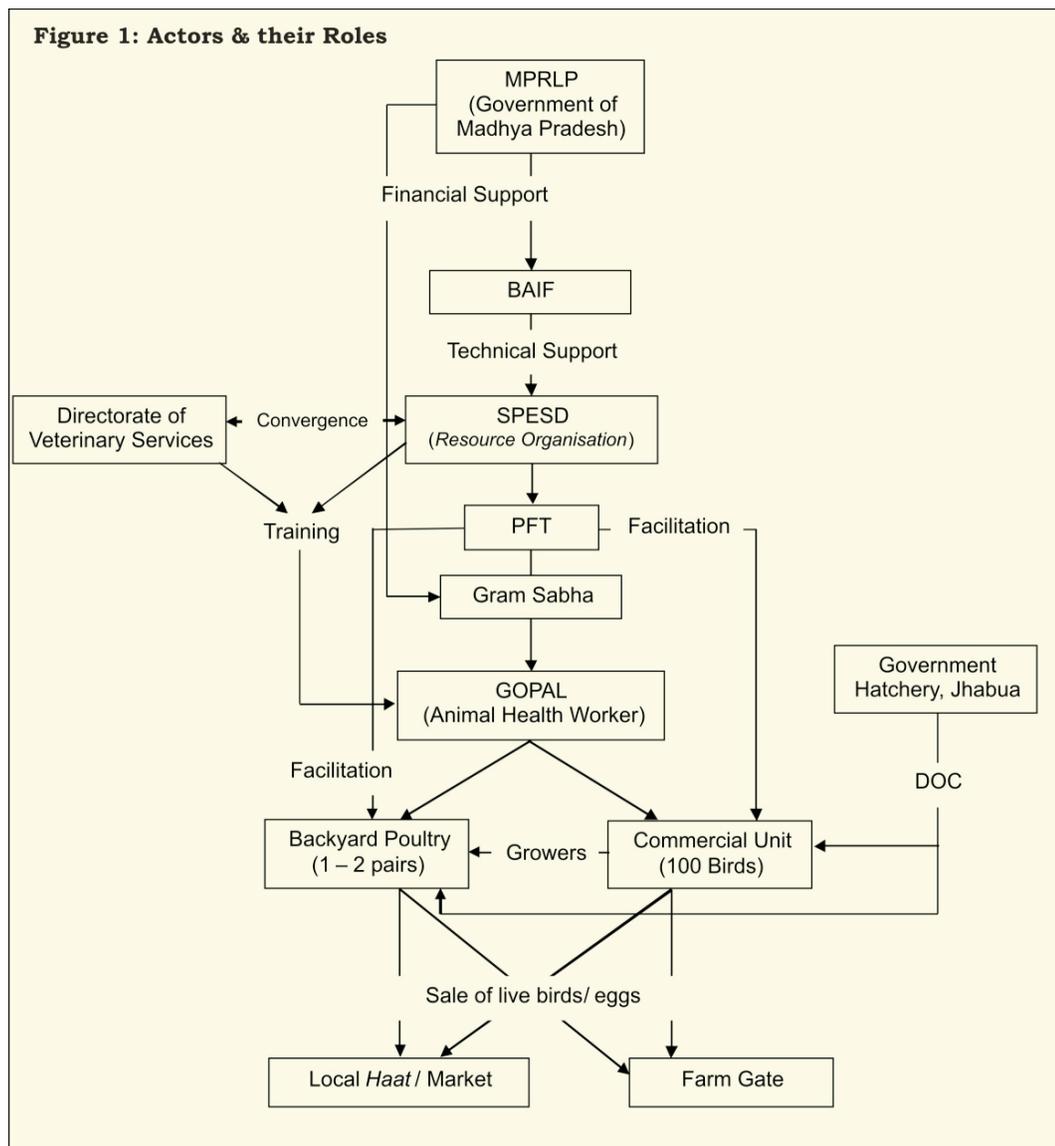
At village level a animal health worker, trained by the Department of Veterinary services in basic skills required for preventive, curative health and improved management practices, functions. SPESD provides advanced training to fine tune these skills for field level service. These animal health workers are called Livestock Service Provider (LSP) or Gopals (village health workers) and are part of the PFT. They are self employed and provide services to all the livestock, including goat and poultry.

The government hatchery in Jhabua has a capacity of hatching and brooding 50,000 chicks per year. The biggest problem being faced is of limited parent stock (around 1,000) and, therefore, it can not fulfill demand of the market. Moreover the hatchery does not have a supply chain and chicks have to be bought from the hatchery. It supplies chicks primarily to the Animal Husbandry Department Schemes and if stock remains, then supplies to others projects, individuals etc. 15-20 days old chicks are collected from the hatchery by beneficiaries with help of officials and PFT. Hatchery supplies chicks as per their availability so this collection process takes time. Number

⁸ Gram Sabha represents Panchayat Raj System at the village level

of chicks is provided as per the demand of the farmer. Cost of 15-20 day old chicks is Rs 25 per chick. Depending upon the scheme the cost may be subsidised or have to be paid in full by the beneficiary. For instance, in Barwani, the project is paying part cost of chick and part contribution is made by beneficiary. All subsidies are linked with one or the other Government programme/schemes. Initially 2 week old chicks were supplied to the beneficiaries in units for 100s but later on hatching at household level was attempted and chicks produced were either kept for further propagation or sold to other interested farmers. Majority of *Kadakhnath* units were reared on deep litter system as micro-enterprise. Sale is made from farm-gate or from local weekly village markets.

Animal Husbandry Department is not only providing the *Kadakhnath* chicks, but is also responsible for delivery of health services. However, its outreach is limited and SPESD provides these services through animal health workers called Gopals etc. These Gopals ensure regular vaccination against Ranikhet disease, carry out de-worming and provide first aid.



4. Outcomes & Lessons Learnt

Outcomes

Presently around 103 households are involved in keeping *Kadakhnath* on a continuous basis under MPRLP-BAIF project. A number of households have also taken up rearing *Kadakhnath* as Backyard poultry on their own initiative. On an average, a household consumes around 27 eggs in a year, a good protein supplement to their diet. Income from sale of eggs and birds is generally retained by women and used to meet needs of the family. The birds are sold in the weekly market whenever need for cash arises. Rate of the bird is decided between the middlemen and the farmer on the basis of size of the bird and bargained to get the best price.

General remarks of house-holds:
"Overall we are getting double income from *Kadakhnath* as compared to *Desi* birds".

Lessons Learnt

Observations, Learning, Policy Implications and Conclusion that can be drawn based on the experiences of the limited period of one year are summarized below. Observations should be continued to confirm and draw conclusions for future.

- ✿ Traditional, backyard, scavenging system of keeping poultry is an integral part of the livelihood systems of tribal households. Introduction of expensive poultry sheds for indigenous birds and commercial feed do not make sense when they have scavenging base and poor FCR. Use of locally available material for instance bamboo, wood, palm leaves for roof etc for building night shelter are more appropriate and in expensive interventions.
- ✿ *Kadakhnath* is a promising indigenous fowl and needs due attention for propagation in western M.P and other agro climatically suitable areas as it has blended well with the traditional, backyard, scavenging system of poultry keeping of tribal households. Moreover *Kadakhnath* fowl is reported to be more productive and profitable than the *Desi* bird.
- ✿ The households have accepted suggested improvements in management (like vaccination, de-worming) of the birds since these were beneficial and easy to adopt.
- ✿ Introduction of a superior indigenous breed of fowl offers a good alternative for improving livelihood in a sustainable manner since meat and eggs have good demand and are sold at premium The 'niche market for meat and eggs of indigenous fowl' should be fully exploited.
- ✿ Easy access to market, availability of health services, timely advice to the households involved in *Kadakhnath* rearing are major factors responsible for the success of the initiative. Hence there is a need to ensure services (health control, advice and marketing) through trained local youth while planning propagation of *Kadakhnath* rearing.
- ✿ MPRLP and BAIF should initiate development of self- supporting systems of health control service and promote strong link with the Animal Husbandry Department for supervision and technical backup.

- ✿MPRLP and BAIF should reassess pros and cons of promoting semi-commercial units of *Kadakhnath*.
- ✿One of the constraints observed in wider propagation of *Kadakhnath* is non-availability of chicks in view of poor brooding habit of the hens. There would be need to develop mixed units of *Kadakhnath* and *Desi* to ensure supply of chicks. Mother Unit concept should be encouraged in particular so that chicks of 4 to 6 weeks of age, duly vaccinated, can be supplied. Since the Government hatchery cannot meet the demand of *Kadakhnath* chicks, there is scope for public-private partnership.

References

- Abuja V., Dhawan M., Punjabi M., Maarse L. (2008) Poultry based livelihoods of rural poor: Case of Kuroiler in West Bengal. Mimeo. NDDDB-FAO South Asia Pro-Poor Livestock Policy Programme, New Delhi.
<http://sapppp.org/informationhub/doc012-poultry-livelihoods-rural-poor-kuroiler-west-bengal-study-report>
- Abuja, Vinod (Editor). 2004. *Livestock and Livelihoods: Challenges and Opportunities for Asia in the Emerging Market Environment*, National Dairy Development Board, India and Pro-Poor Livestock Policy Facility (South Asia Hub) of FAO.
- Abuja, Vinod and Arindam Sen. 2007. "Scope and Space for Small Scale Poultry Production in Developing Countries", paper presented at International Conference "Poultry in the 21st Century: Avian Influenza and Beyond", Bangkok.
- Dolberg, Frands. 2004. "Review of Household Poultry Production as a Tool in Poverty Reduction with Focus on Bangladesh and India", in Abuja, Vinod (Editor), *Livestock and Livelihoods: Challenges and Opportunities for Asia in the Emerging Market Environment*, National Dairy Development Board, India and Pro-Poor Livestock Policy Facility (South Asia Hub) of FAO
- GOI (2005) Draft National Poultry Policy. Department of Animal Husbandry, Dairying and Fisheries. Ministry of Agriculture. Government of India.
- GOI (2008) National Livestock Policy 2008. Department of Animal Husbandry, Dairying and Fisheries. Ministry of Agriculture. Government of India.
- Mehta. R (2002), *Livestock Industrialization, Trade and Social-Health-Environment Issues for the Indian Poultry Sector*, Livestock Industrialization Project: Phase I, IFPRI, 2002. (available at) <http://www.fao.org/WAIRDOCS/LEAD/X6115E/x6115e0c.htm>
- Rangnekar, S.D. and Rangnekar, D.V. (1999): *Developing traditional family poultry production in tribal belt of western India*. Free communication 5, this First INFPD/FAO Electronic Conference on Family Poultry.
- Rao G V and Thomas P C 1984 *The breed characteristics of Kadaknath breed of indigenous (Desi) chicken*; *Avian Research* 68: 55 – 57.
- Thakur M S, Parmar S N S and Pillai P V A 2006: *Studies on growth performance in Kadaknath breed of poultry*. *Livestock Research for Rural Development*. Volume 18, Article #116.
<http://www.cipav.org.co/lrrd/lrrd18/8/thak18116.htm>

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About this Potential Good Practice Note

This Note showcases a government initiative to promote and introduce in new areas, indigenous poultry - *Kadakhnath*, in order to enable bio diversity conservation as well as enhance livelihoods that can reap benefits for the tribal poultry rearers as well as maintain their poultry heritage.

Although the project is fairly recent and support of the implementing agency is presently continuing, a number of lessons emerging from the practice can help future replication thereby establishing it as a sustainable community initiative.

SOUTH ASIA Pro Poor Livestock Policy Programme

A joint initiative of NDDDB and FAO

Regional Office:

NDDDB House (6th Floor) PB 4906, Safdarjang Enclave

New Delhi - 110029, INDIA

Tel: +91 (0) 11 2619 7851 / 7649 • Fax: +91 (0) 11 2618 9122

E-mail: sapplpp@sapplpp.org

Website: www.sapplpp.org

Partnering Institutions

BRAC
BRAC Centre
75 Mohakhali, Dhaka 1212
BANGLADESH
Tel: +880 2 8824180-7 Extn: 2311
Fax: +880 2 8823542, 8826448
E-mail: saleque@sapplpp.org
saleque.ma@brac.net

Department of Livestock
Ministry of Agriculture
Thimpu
BHUTAN
Tel: +975 (0) 2 351102
Fax: +975 (0) 2 322094, 351222
E-mail: tshering@sapplpp.org
naip@druknet.bt

BAIF Development Research
Foundation
Dr. Manibhai Desai Nagar, NH 4
Warje, Pune 411058, INDIA
Tel: +91 (0) 20 25231661
Fax: +91 (0) 20 25231662
E-mail: sepawar@sapplpp.org
sepawar@baif.org.in

For copies of this publication, kindly contact the Regional Office or the Partnering Institutions