



RAINFED
LIVESTOCK
NETWORK

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Position Paper
from the Rain-fed
Livestock Network
on critical issues
affecting India's
traditional livestock
rearing systems

Strengthening Backyard Poultry

Financial and Nutritional Security for Poor Households

Summary

Backyard Poultry (BYP) or native birds provide important subsidiary income and nutrition to a large cross-section of rural households in India, particularly in its rainfed areas. These birds also play an important role in traditional rituals and cultural activities in rural India.

Policy-makers and programmes have overlooked these traditional Backyard Poultry systems in favour of industrial-production systems using exotic and cross-breeds. Even the small number of programmes addressing issues of backyard poultry have been limited by the lack of understanding of BYP production systems and by preconceived notions of their poor production potential.

The Rain-fed Livestock Network believes it is time to create an enabling environment through the right policy frameworks that would strengthen Backyard Poultry systems and take into account the needs and priorities of poor communities. Focused research could bring technological improvements that are beneficial and affordable to the resource-poor. There is a strong need to focus on in-situ conservation of native breeds and to extend better management systems and good health care. The commercial sector and backyard poultry sector can exist together as birds kept under traditional scavenging systems have a distinct, niche market, which must be explored further.

A decentralised program on an 'area basis' working simultaneously on developing better institutionalised healthcare systems, universal vaccination, improved management practices, and marketing is required to strengthen the Backyard Poultry sector.

The Backyard Poultry Sector— No Chicken-Feed

Increasing Significance of BYP for Poor Households

For many poor, Indian rural families, keeping backyard poultry is a significant livelihood activity. Various field studies¹ have revealed that women or elderly family members of poor households with either marginal or no land holding; primarily from the lower socio-economic strata, largely manage Backyard Poultry (BYP). These native birds provide important subsidiary income and nutrition to a large cross-section of rural households, particularly in rain-fed areas. The most important aspect of BYP is the financial security it provides to women. This is especially true in cases where the numbers of hens are below six. Many traditional rituals and cultural activities (cock fighting) in India's rural parts are associated with native birds. In the tribal belts of Orissa, Jharkhand, Chhattisgarh, Madhya Pradesh and Andhra Pradesh, cock fighting is a popular sport. Fighting cocks fall under the special breed category. They are raised with care and sold at very high prices, ranging from Rs 500 (US\$12.67) to Rs 3000 (US\$76.05) for a cock that is around a year old (Version 1, Poultry Sector Review, FAO 2008).

Native birds kept under traditional scavenging systems have a niche market and are highly valued by rural and urban dwellers; both rich and poor. The prices per kg live weight are 50 to 100 percent higher than those of industrially produced birds. These native birds are also considered to be the equivalent of 'organic' chicken and have a lower fat content than industrially produced birds (Conroy et al 2005). Even though data on consumption of native chicken is not available, the increase in population of native birds from 188.36 million in 1997 to 238.21 million in 2003 (8.3 percent per annum) can be taken as an indicator of preference for native birds by consumers.

¹ a) Conroy et al 2005,

b) Rangnekar & Rangnekar -Second FAO Electronic Conference,

c) Kuntakar 1999,

d) RLN BYP Research Pilot 2010



Backyard Poultry (BYP)

RLN uses the term 'Backyard Poultry' (BYP) for native birds produced under the traditional system of scavenging. These native birds are characterised by their ability to thrive under local climatic conditions for which they are well adapted.

They require low, or almost no, external inputs for production. These native birds are resistant to diseases and possess an innate capacity to protect themselves from predators. They also do not require extra labour, specially allocated land or depend on external supply–support systems for production.



Diminishing Significance of BYP for Policy Makers

Despite its significance policy makers have neglected the traditional BYP sector. Virtually all focus and investment has been towards expanding the industrial poultry sector. Even the limited number of programmes addressing issues of backyard poultry have been constrained by the lack of understanding of BYP production systems and by preconceived notions of their poor production potential. This has led to programmes that attempt to replace existing indigenous breeds with either exotic, or a mix of exotic-indigenous breeds. Though these exotic or mix of exotic-indigenous breeds have a higher production potential, these improved breeds demand more resources and care and rely on externally supported systems. In addition, they are poor scavengers, non-broody in nature and cannot cope with predators. The inability of the hens to brood results in a continued dependence on the supply from hatcheries run either by government farms or private players. This needless impetus on promotion of new breeds also threatens the survival of the indigenous population. It is estimated that due to deficient health delivery systems, disease outbreaks and increased demand for improved birds, indigenous poultry is facing a decline.

Although the output from backyard poultry, in terms of eggs and meat, is very small compared to commercial poultry, it persists even after four and half decades of commercial poultry production. Statistics reveal that backyard poultry sector of rural India maintains 52 percent of the total bird population and contributes 23 percent (2005-06) of the total eggs produced. This contribution, though it is declining, is still significant. The decline is

mainly due to the increased placement of improved layers year after year with no such effort for indigenous fowl layers. (Version 1, Poultry Sector Review, FAO 2008).

Evidence from initiatives documented by the South Asia Pro Poor Livestock Policy programme (SAPPLPP) and various research based studies across India clearly highlight the positive impact of regular healthcare service delivery, continued supply of vaccines and improved management practices resulting in improved economic gains for households raising backyard poultry. Without any inputs and improved practices BYP gives an annual income around Rs.2000, which is equivalent to income generated from agriculture on one acre of dryland. In addition, projects implemented by NGOs like Anthra² Andhra Pradesh, the Bastar Integrated Livelihoods Development Programme (BILDIP) in Chhattisgarh and the DANIDA initiative indicate that net income from BYP can go up by 200 percent per household (Rs. 4000 to 5500 per annum).

Growing Together

It appears, the growing commercial poultry sector is showing signs of suppressing BYP rearing. However, restraining BYP may not be the right way of working with it. There is well thought-out opinion that BYP may not be a constraint for the commercial poultry sector, after all. This is because there is significant scope for market segmentation and product differentiation. This points to the need to put more efforts into strengthening rearing BYP as it is a very lucrative source of livelihood. It acts as a safety-net for small and marginal farmers, especially in the context of increasing climate variability and

² See link: <http://sapplpp.org/goodpractices/small-holder-poultry/SAGP25-unpacking-the-poor-productivity-myth/>

associated crop failures. BYP rearing also efficiently utilises locally available resources, provides job opportunities and economic and food security. It is environmentally friendly and energy independent, which are important considerations in the current scenario of power shortages and climate change.

The immediate need is to develop a proper understanding of the different and complex production systems under which these birds are reared. In addition, understanding its importance (social-economic) to the household and the key problems faced across different regions will be the initial steps towards developing an appropriate strategy for promotion and strengthening of backyard poultry. Research into improving traditional scavenging systems would further strengthen it against competition from the industrial poultry sector.

Revitalising Backyard Poultry Systems

After considering the consequences of decades of ill-applied practices stemming from flawed policies affecting backyard poultry, the Rainfed Livestock Network considers the following areas require urgent attention from the government, policy makers, scientists and organisations from the social sector and the poultry industry.

i.] Understanding Backyard Poultry Systems, Especially from Rain-fed Areas
BYP are native birds that need low or no external inputs for production. These birds get most of their feed from scavenging with little supplementation and do not require extra labour or exclusive land

allocation. They are best adapted for local climatic conditions and are extremely hardy creatures, for they thrive well in harsh conditions, are free from diseases that blight commercial fowls and can protect themselves from predation. In poor households women or the elders in the family manage these birds, which are a good source of supplementary income and nutrition for the family.

Policy makers need to recognise the important role of these 'desi' (native) or indigenous poultry in the livelihoods of the poor. A clear distinction must be made between rural poultry and backyard poultry. This calls for identifying and detailing BYP typologies of rural poultry and highlighting the space for native BYP.

There has been relatively little research on the backyard poultry system, regarding both constraints and technological improvements that could be affordable to the resource-poor. With most research³ concentrated on intensive production systems or 'improved breeds,' experts and decision makers lack a clear understanding of backyard poultry. This is especially true of poultry from rain-fed areas (arid and semi-arid regions), about which there is inadequate primary research on the economics and socio-cultural relevance of backyard poultry and virtually trivial estimate of households engaged in rearing backyard poultry.

ii.] Strengthening BYP Systems

Evidence from initiatives documented by SAPPLPP clearly highlight the positive impact of improved health service delivery and timely vaccination measures in improving the economic gains of households engaged in poultry keeping.

³ Also refer deliberations at National-level Workshop on Strengthening Backyard Poultry organised by WASSAN in collaboration with Rainfed Livestock Network (FES) & South Asia Pro Poor Livestock Policy Programme on 9th & 10th July, 2009



Some key interventions, by governmental and other agencies, which have been beneficial and have ensured better benefits from BYP, are:

- *Improved Delivery of Health Services:* Trained local para-vets and regular health care services helped in disease prevention, control and checking mortality. The continued presence of veterinary officers specifically trained to address the need of backyard poultry strengthened service delivery. Frequent, undesirable transfers of such officers create problems to the communities. In the context of delivery of health services, the Government - NGO partnership (Bangladesh experience – documented by SAPPLPP) has shown good results. This experience also highlights the importance and need for mass vaccination and maintenance of cold chains. Extension services based on proper institutional development (through self-help groups and other village-level institutions) have also been successful.

- High mortality due to contagious diseases, compounded by out-of-stock or unaffordable vaccines have limited the move to strengthen backyard poultry systems. There is a need to invest in research and development of thermo-stable vaccines using local strains (Newcastle Disease (ND) and Fowl pox (FP) separately or polyvalent) and for designing a delivery and supply system of these vaccines in small dose vials.

iii.] Focus on In-situ Conservation of Native or Desi Birds

The current breeding systems adopted by the industry involve crossing of exotic birds with local birds or even total replacement of local birds with exotic breeds. As a result many different genetic combinations are produced and there is gradual diminution of the local birds that would lead to ultimate disappearance of some local breeds. There is a strong need to conserve poultry genetic resources as native birds are a gold mine of genomes with genes that could help improve high-yielding,

exotic germplasm for adaptability to tropical conditions and disease resistance. Conservation of these birds will provide a source of native germplasm and has immense utility for improving production in backyard poultry systems.

iv.] Strengthening Marketing Systems for Improved Economic Gains

Current market tie-ups between producers and consumers for *desi* birds are deficient and ineffective. However, a premium market for these birds already exists for both economic and cultural reasons. This market need must be explored and systematically strengthened.

v.] Enabling Policies and Programmatic Support for BYP

Most investments made by the public sector or the private sector so far, are almost exclusively on development of breeds with exogenous breeds (or with little local breeds), while the real requirement requires extending better management systems and good health care. Furthermore, there is a need to put forth a more decentralised program on an 'area basis' working simultaneously on developing better institutionalised healthcare systems, universal vaccination, improved management practices, support for local chick rearing centres and marketing.

RLN- Piloting Action Research

Experiences and research studies have recognised that though poultry has been one of the fastest growing segments of the agricultural sector, this growth has been mainly limited to the commercial poultry sector, neglecting backyard poultry and its potential to address the livelihoods of the poor.

In the above perspective, RLN has identified 'Backyard Poultry' as an important theme to address livelihoods of poor households. As a first step, RLN is implementing a pilot project on strengthening backyard poultry across 12 locations in the arid and semi- arid states of India with 7 partner NGOs.

It aims to scale the experience and the positive lessons derived from different projects on traditional backyard poultry and further build a clear understanding of these systems across different locations. The project takes an action-research methodology and aims to build the capacities of partners across locations to engage with the issue, have a deeper understanding of the local context in which households raise these birds, network with local veterinary departments to strengthen delivery of health services and promote a package of practices that can reduce mortality, raise production levels and improve economic returns to households.

The pilot will lead to an articulation of a proposal for greater public investments for strengthening these systems by:

- Establishing effective community-level service delivery systems in terms of health care, improved protection, better management practices and marketing for enhancing the livelihoods of rural people (with a focus on poor and women).
- Evolving appropriate strategies for larger scale, *in situ* conservation of native poultry breeds in the tracts where they are established.
- Highlighting the potential of the initiative in terms its impact on the household economy.
- Packaging the experiences into *draft program guidelines for strengthening backyard poultry* for the 12th Plan.

Contributors- Collaborators:

Ashalatha, ANTHRA; Kornel Das, SA PPLPP; Mamtha Dhawan, SA PPLPP; D.V Ranganekar, BAIF; Prakash Shinde, Govt. Chhattisgarh; P. Rajerethinam, TN-LIFE NETWORK; Vijay Mohan Rao, WASSAN

Recommendations and Participants from National Workshop on Synthesizing Experiences in Promotion of Backyard Poultry; Date: 9-10th July 2009 organised by WASSAN & RLN

RLN- Network

Kamal Kishore

Coordinator, Rain-fed Livestock Network

K. Bhavana Rao

Core team member representing WOTR

Rahul Chaturvedi

Core team member representing FES

A. Ravindra

Core group member from WASSAN

Bhagya Laxmi

Core group member from WASSAN

Vasant Saberwal

Core Group member from Ford Foundation

