

Review Article

DOUBLING INCOME OF INDIAN FARMERS BY 2022: SOME SUGGESTIONS

**Meshram P.V.*, Moregaonkar S.D, Shetye M.V, Dhule R.P, Bembde N.S, Bomble P.S
and Deshpande R.R**

Department of Pathology, Bombay Veterinary College, Parel, Mumbai -12,
Maharashtra Animal and Fishery Sciences University, Nagpur, India
E-mail: pramodvetpath@gmail.com (**Corresponding Author*)

Abstract: The agriculture based Indian Economy needs high agriculture income for the farmers who feed the 1.25 billion Indian populations. But how to achieve the dream of substantially increasing the farm income is a big question. Government has decided to double the farmers' income by 2022 adopting various policies and schemes. The Niti Aayog has come out with agenda and percolating their plan of actions. The goal is achievable if the farmers as well as animal owners adopt and use the modern technology. Developments at local body, state government levels, central government levels and combined proposal from state and central is mandate to implement various strategies effectively to raise and double the farmers income. This act will attract more and more people towards animal and agriculture sector to build the nation of new era.

Keywords: Doubling income, Niti Aayog, Indian Economy, Agriculture Sector, Animal Husbandry.

Introduction

Recently, NITI AAYOG urged states to take steps ranging from creating farmer friendly agriculture market to land leasing reforms, needed for doubling farmer's income by 2022- the 75th anniversary of India's independence. Indian people needs to provide their ideas and suggestions for planning a vision to double the income of Indian farmers upto 2022 which stimulated us to write this brief manuscript for further considerations if any, in future. The following figures clearly highlight the importance of livestock and agriculture sectors in overall rural development of India. Therefore this emphasizes the development of this sector for doubling the income of Indian farmers in 2022.

Total agriculture GDP contribution is 25.6 % of which 15.1 % of total agriculture GDP goes to agriculture and allied businesses whereas, 4.11 % GDP contribution goes to livestock, 0.8 % to fishery sector and remaining contribution is of dairy, poultry and allied sectors. Livestock plays an important role in Indian economy. About 20.5 million people depend upon livestock for their livelihood. Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households. Livestock provides

livelihood for two-third of rural community. It also provides employment to about 8.8 % of the total population in India. India has vast livestock resources.

As we are working in Animal Husbandry Sector, this write up mostly focuses on the overall development vision of Animal husbandry/ dairy/ fisheries sectors. However, as all these sectors are agriculture allied businesses some of the suggestions could be common for agricultural sectors too. This is really a vast subject, which encompasses variety of businesses providing best opportunities for rural people of India for getting their livelihood. Therefore we have divided our writings into five major areas of development.

1. Participation of animal owners
2. Developments at local body levels
3. Developments at state government levels
4. Developments at central government levels
5. Combined proposal for state and central.

1. PARTICIPATION OF ANIMAL OWNERS

In a democratic country like India it is highly essential to have participation of people for development of a nation. Every person should feel that he is giving his best for the overall development of the country. In this context following are some suggestions for considerations.

A. Animal service funds:

For overall animal welfare and development, at a village levels the funds are required. The gram panchayat of a particular village should open an account called “ANIMAL SERVICE FUND ACCOUNT” in which the animal owners should contribute at the rate of 10Rs / large animals, Rs. 5/small animals and Rs.1 / bird per year and incumbent Gram Panchayat should add 50% of the amount generated by the people into this account as its share for this grate cause. Moreover, the money generated in this account should be utilized for animal welfare programme in that village premises only.

B. Co-operative animal husbandry at rural levels:

For the common programs of animal husbandry practices such as deworming, removal ticks and ectoparasites by spraying, mass vaccination of animals, animal health camps etc. at a rural level is not a task of a single farmer for getting benefits of these unmasked programme. A co-opeative animal husbandry programme organization is essential.

C. Formation of Animal Development Committee at village level:

For integrated development of animal husbandry business at village level there is dire need to form a central Animal Development committee. In this committee the progressive farmers, animal owners, representative of animal based business (dairy product producers, small slaughter unit owners, fishery businessmen etc.), the veterinarian/ paraveterinarian working in that area, surpanch, gramsevak/gramsevika/police patil and the chairman of the committee should be block development officer (BDO).

2. DEVELOPMENTS AT LOCAL BODY LEVELS

Participation of local bodies such as Gram Panchayat, Taluka panchayat and Zillaparishad for rural areas and municipal council and Municipal Corporation at urban areas is highly essential for overall development of animal husbandry section. At present there are so many schemes/ plans prepared and being executed by these local level organizations.

i. Gav tithe Khataka (construction of animal travis)

In order to control the animals during their treatment, vaccination, AI activities it is highly essential to have at least one khataka at village levels. Actually, there should be one veterinary clinics at each village however, if it is not feasible at least one such animal Travis can be established on a Government land which will facilitate the visiting veterinarians (may be Govt. or private) in smooth conduct of these animal husbandry activities.

ii. Common disposal facility for animal carcasses

In order to control the spread of diseases every village should have common disposal facility for carcasses of large and small animals and birds separately.

iii. Kohra Kendralay facilities

It is to be noted that there should be well established Kohra Kendra about 50-100 KM away from Mumbai located near Mumbai Ahmadabad highway (ALI AWAR JUNG MARG) owned by some Gujarati people and working on a co-operative basis in such kohra Kendra's each and every part of animal body can be utilized for making some goods such as tanneries, leather industry, manual industry etc. this is highly profitable business the individual farmer or co-operative unit can be established at a big village for which there will be continuous source of dead carcasses from nearby that area. Such kohrakendra also can be established at every municipal area and at least one or two Kendra's at municipal council areas.

iv. Constriction of animal shelters

In such animal shelters the sick and non productive, physically disabled, victim of accidents, nomans animals can be admitted. These animal shelters can be formed by a group of animal

lovers in the areas. The local bodies should provide the facilities such as electricity, water supply free of cost. The land required on concessional basis and some funds for construction of these animal shelters.

v. Constriction of small animal slaughter houses and allied facilities:

At present there are meager well planned, well-constructed and scientifically raised slaughter houses in the rural and urban areas. Local bodies should consider this point not only for clean meat production but also for better health. Such slaughter units should be there at each and every village, municipality depending upon the required of theta areas.

vi. Local breed conservation programme:

Actually breeding is a state/ central level policy however, at local levels the people should come up to conserve the local breeds individually and on co-operative basis. The local bodies can support to such innovative project in their areas.

vii. Appreciation of champion animal and their firms:

In order to inculcate the competitive animals breeding and husbandry ractices in the area the prizes should be given to the champion animals and even their owners. The local bodies also can give *Khawti* (Feed ration) to such champion animals in order to sustain their health, productivity and breed characteristics by providing funds on monthly/ yearly basis to such animal owners.

viii. Organization of Pashuyatra /medava/shibir:

Local bodies should orgies such events t boost the animal husbandry business in the area. Animal/dog shows, cart wheel races and other type of animal races with legal permissions can be organized from time to time.

ix. Rabies/ neuter vaccination programme

At present such programme are there included in local body programme however, considering the dreadful nature of communicable disease it is highly essential to restructured the programme in collaboration with veterinary colleges, nearby areas and animal husbandry department (Veterinarians).

x. Provision of market place for farmers

Local bodies should provide some area (galas) for selling of goods (agricultural and animal husbandry) by the farmers directly to the consumers. This place should be in the central market areas of the local body.

xi. Constriction of cold storage/ storage houses:

The local body should encourage individual people/ organizations/ co-operative society for construction of cold storage for storage of perishable food item) storage houses for storage of crops and goods) which will be game changer for marketing of agriculture I and agricultural based product industries.

xii. Animal health hospitals:

At present there are animal health hospitals but which is not adequate considering the growing animal populations. It can be recommended that there should be one hospital per 1000 animal si the area. Such hospitals not only Cather animal health services but also would be helpful to prevent the spread of communicable diseases to animal owners and people I the areas.

3. DEVELOPMENTS AT STATE GOVERNMENT LEVELS

State Govt should provide the enormous funds for Veterinary Sector which is now called as a Agriculture allied industry but, with vast and fast development of this sector (being essential commodities) in last 10-20 years this has become a separate industry growing at a faster rate than agriculture industry.

The funds for below mentioned developments under state subjects can also be pooled from Corporate Social Responsibility Expenditure of the industries which is supposed to be 2 % of their average profit of last three years.

a. Establishment of Regional disease diagnostic laboratories:

At present in every state there are at least two or more Govt veterinary colleges having infrastructures such as land, buildings and staff. It is recommended that every state should have regional (a region within the state) disease investigation laboratory attached and under veterinary college.

b. Establishment of one forensics laboratories cum specialty hospital in a state:

As the crime and cruelty against animal sis at increased it is highly essential to have and state level forensic cum specialty hospital catering the services to animal husbandry department of state are in dire need.

c. Conservation and development of “ Deshi- Local breeds” :

Every state should have fixed plan for conservation and development local pride breed of the state for e.g state of Maharashtra should have a long term policy for conservation of Devni, Red kandhari, Gowlav and dangi breeds of the cattle. State should form different

constitutional board for looking after these activities not only the state but center should provide funds for such local breed development boards.

d. Widening of coverage of AI services:

Artificial insemination should be used a tool for not only increasing the productive and reproductive performance of local animals by adopting crossbreeding programme but also should looked into the conservation of germ plasmas of pride local breeds. More allocation of funds and expertise in this area is the need of hours.

e. Co-operative animal farming:

On the analogy of co-operative dairying, banking, sugar industry etc. a co-operative dairy / fishery/piggery/ poultry farming should be encouraged. The state as well as central Govt. should provide strong financial support to such activities. One example is in the major and minor irrigation projects the co-operative fish farming can be encouraged.

f. Constriction of cold storage/ storage houses:

The state should encourage and for construction of cold storage for storage of perishable food item) , storage houses for storage of crops and goods which will be game changer for marketing of agriculture and agricultural based product industries with in the state and even for export to other state and countries.

g. Separate start up projects for Jobless youths:

The jobless youth should be provided with startup projects in the animal husbandry sectors in collaborations with the center and industries, considering the local ne animal husbandry / dairy and fishery etc., local inputs and demand for export

h. Establishment of panjar pol:

The state should consider the establishment of panjar pol (animal care unit) of at least 500-1000 animals capacity at regional level. In such animal shelters the sick and un productive, physically disabled, victim of accidents, nomans animals can be admitted. These animal shelters can be formed by a group of animal lovers in the areas.

i. Completion of irrigation projects:

At present there are plentiful half completed major and minor irrigation projects in Maharashtra and other state due to paucity of funds, the projects remained in incomplete form since many years. The state should workout the priority and provides the funds to complete them these irrigation projects would been the revolution in the crop production and animal husbandry production in the area.

j. Participation of agriculturist / veterinarians in disaster management Team:

In natural disasters, in natural disaster team formed at local, state or national level one member of agriculturist or veterinarian should be incorporated in it for better management of the disaster.

k. Separate animal husbandry / dairy and fishery department:

Every state should have Separate animal husbandry / dairy and fishery department with a separate minister, separate allocation of funds. Total allocation of funds to this department should be 10-20 % of the state funds. This will definitely concentrate overall development of these sectors.

l. Separate animal husbandry / dairy and fishery department:

There is dire need to establish a separate veterinary engineering college in each state which will look after modernization of animal husbandry / dairy and fishery sectors.

m. Farmers cell centers:

The existing structures of marketing committees (APMC) seem to be outdated. The rates of the goods produced by farmers are not controlled by farmers and consumers but by the middle agencies, vendors etc. At present there is a national egg co-ordination committee (NECC) which governs the rate of sale of egg throughout India on this analogy the state should form a separate rate controlling authority for animal husbandry products this authority not only look after rates of the goods/ products produced by farmers but also they look after buying capacity of end users. Similarly, this agency can also control the quality of these products.

n. Co-ordination/ renovation/combination of existing state level scheme:

At present there is lot of schemes which needs to be restructured. At present in most of the schemes the animal owners below poverty level, landless labors etc. are being considered. These needs to be modified to marginal farmers having a land more 5 hectares so that, the agriculture product such as fodder, land, water etc. can be used for animal husbandry. In this connection preference should be given to land owners, low income farmers etc.

o. Extension of services of modern engineering equipment's at taluka level:

Most of the Indian farmers / animal owners are deprived of modern engineering tools for their farming/ industry, as the cost of these equipment's is not affordable to them however, if these equipment's would be made available to them (on payment basis) definitely it will increase crop productivity/ animal productivity and overall income of the farmers. Therefore it is proposed that at every Taluka level a agency should be formed preferably on co-operative

basis which can procure and keep such equipment's with it and run this unit on no profit no loss basis. For example, a harvesting machine can be procure and kept this agency. The Govt. will provide infrastructure land to keep these equipment and also financial assistance in terms of low interest rate loans to this co-operative unit.

p. Recognition to Veterinary Officers to act as the licensing and Regulatory officers.

As a veterinary officer is a gazzeted class-II officer and in real science one of the highly technical and educated officer working at village/ Taluka level it is proposed that he may be identified as the Licensing and Regulatory Officers to regulate and act against the illegal cattle stables operating in that area, illegal slaughter in the area, illegal milk adulteration in the area, cruelty to the animals in the area etc. in this context State has to take a lead to come up with the necessary legal provisions. On the analogy of drug inspector, metrology officer/ weights and measures officers working under consumer welfare department.

4. DEVELOPMENTS AT CENTRAL GOVERNMENT LEVELS

At present the Central Govt is planning to double the income of Indian farmers by 2022. And in this directions lot of steps have been initiated by the Govt. in the recent central budget, the total budget allocation to agriculture Department was 35, 984 crores in 2016-17 as against 24,909 crore in the year 2015-16 with about 44% increase in the outley of the budget. This is the highest budgetary allocation so far to this sector.

It is proposed that, the additional funds can be created 2% cess can be added on direct and indirect access for additional funds to implement more schemes for dubbing the income of farmers in 2022.

We hereby propose the following points for considerations.

a. Separate ICVR

It is proposed that there should be separate regulatory body called Indian Council of Veterinary Research for funding and regulations in the field of Veterinary, dairy, fisheries and allied businesses. This is a continuous demand of the veterinarians since long. As ICAR is governing more than 100 national institutes throughout India right now in addition to Veterinary and agricultures universities.

b. Establishment of Pashu Vigyan Kendras

At present there are many Krishi Vigyan Kendra located at different district/ Taluka levels throughout the country on the same analogy, there is a need to spread the network of Pashu vigyan Kendra's with the objectives of imparting education to entrepreneurs and farmers.

c. Co-operation and co-ordination of all national institutes with local/state Institute:

Center should take necessary steps to make it mandatory to all national Institutes to co-operate and to co-ordinate research, education and extension activities of local (state level Institutes) most of the central Institutes are highly equipped with state of art facilities and equipment which can be used for research and educational activates of the state level institutes and collages. At present meager efforts are being made by these institutes toward this area this will facilitate the proper use of equipment and creation of research and education environment in the area.

d. Implementation of One health Programme

Many emerging health issues are linked to increasing contact between humans and animals, intensification and integration of food production, and the expansion of international travel Of the 1,415 microbes that are known to infect humans, 61 percent come from animals. For example, rodents transmit plague and typhus to humans, and domestic livestock are the original source of crowd diseases such as measles, mumps, and pertussis. One important exception is *Mycobacteria tuberculosis*. Genetic evidence suggests that *Mycobacteria tuberculosis* originated in human populations and spread to animals."One Health Initiative" is a multidisciplinary collaborative approach to solving global and environmental health challenges. When an outbreak of pandemic disease occurs, traditionally public health AND veterinary services respond as separate entities – no coordinated response occurs between services. Joint Service Provisions is an example of added value through better cooperation between animal and health sectors. The sharing of infrastructure and equipment clearly illustrates the cost reduction associated with a collaborative approach. Ministries should work together to distribute burden; costs/benefits of disease-causing activities are not born by the same sectors. Rolling up costs for integrated systems saves money across sectors.

e. Tax exemption for animal health and care instruments/ equipment.

In order to extend better health and care to animals either tax hault zero tax or tax exemption policy for instruments and equipment required to be imported should be adopted.

f. Make in India in Veterinary Sector:

In ambitious programme” make in India “launched by Central Govt. the veterinary and animal Husbandry Sectors needs to be open up inviting direct foreign investments in the fields of animal health care, prevention of cruelly, dairy, poultry and fisheries. It will not only create the jobs to vet youth but also provides lot of opportunities to farmers/ animal owners/ entrepreneurs under this programme.

g. Startup projects for Jobless youth:

Recently Govt. of Maharashtra unveiled a plan to encourage enterprise amongst students and young graduates who are keen to buy or rent space/ property the state has proposed 100 waivers on stamp duty and registration fees on their first transaction and 50% on the second. The Govt. has prepared a draft which is now in public domain and needs to be implemented. In this draft to enable ease in doing business, a single window system is proposed for permission and license; time frame for clearances are sought to be brought down to 12 days.

h. Fodder production on forest lands:

There is a tremendous scope for cultivation of fodders on forest lands which are mostly under the control of ministry of environment and forest Govt. of India. This will not only be useful to animals living in forest but also can be made available (when there is a surplus production) to the domestic animals nearby the area.

i. Establishment of panjar pol:

The state should consider the establishment of panjar pol (animal care unit) of at least 5000-10000 animals' capacity at regional level. In such animal shelters the sick and unproductive, physically disabled, victim of accidents, nomadic animals can be admitted. These animal shelters can be formed by a group of animal lovers in the areas. The state should provide the facilities such as electricity, water supply free of cost.

j. National agriculture/ veterinary engineering institute:

It is proposed to establish at least one national agriculture/ veterinary engineering institute.

k. Milk food 3 scheme:

It is proposed to launch milk food 3, an ambitious national level programme with international help and co-ordination, while implementing this programme the merits and demerits of milk food 1 and 2 should be taken into consideration. There are many fast growing cities like Mumbai facing the problem of short supply of milk and milk products, unnecessary rise in their cost, shortage of supply (when demand is high etc.) which can be taken care of by boosting milk production, procurement, quality control under this programme.

5. COMBINE PROGRAMME:

Combined programme can also be implemented as follows.

a. Animal health cards:

On analogy of krishi health cards and human health cards a scheme for issue of animal health cards.

b. Aadhaar like Id's for all domestic animals:

Recently, a high level interministerial panel has recommended ADHAR like ID for cattle. (cows, calf, oxen and bulls) in the country. In this scheme it is proposed to tag these animals with a tamper proof Unique Identification Number (UIN) to stop the cross border smuggling of these animals. Each animal will be tagged with UIN with proper records of identification details such as age, breed sex, lactation, heights, body Colour, horn type tail switch and special marks. The union ministry of agriculture had devised these UIN and proposed to make it mandatory to all cows and their progeny.

c. Co-ordination/renovation/combination of all national level scheme under one window system.

In proper implementation of doubling the income of Indian farmers by 2022 it is proposed to implement these schemes under one window system where farmers can acquire information and get benefits at one place as agriculturist and veterinarians are intimately once with ililnentaio of these project they should be included in the panel formed under one window system.

References

- [1] Loksatta Mumbai, Monday, 24th April 2017, under Vividha, p.8, "Increase the speed of Development of fundamental needs- An appeal of PM in the meeting of Niti Aayog".
- [2] The times of India, Mumbai/Navi Mumbai, Monday 24/03/2017 P. 10. "Takes steps to double farmers income by 2022, Niti tells States".
- [3] 'One Health' - From Wikipedia, the free encyclopedia.
(https://en.wikipedia.org/wiki/one_Health) p. 1 to 4.
- [4] "Telephonic communication to the manager," kora Kendra Mumbai, on 25/04/2017, Information regarding Mumba' is Kohra Kendra activities.
- [5] "Centres's model Agri law to bring buyers and farmers closer", The times of India, Mumbai, Navi Mumbai, Wednesday, April 26th 2017, p. 16.
- [6] Aadhar-line ID for all cattle from, says Govt", times of India, Mumbai/Navi Mumbai 25/04/2017 p.1.
- [7] "Civic Policy to take illegal cattle sheds ready to roll", the times of India, Mumbai/ Navi Mumbai, 26/04/2017 p.6.
- [8] "Government to waive stray duty for startups buying Space- Blue print to Nurture Entrepreneurs", Times of India, Mumbai/ Navi Mumbai, p. 4. 27/04/2017.