## Government of Himachal Pradesh Department of Animal Husbandry

File No. AHY-F(1)-1/2019

Dated Shimla-171002,

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**NOTIFICATION** 

The Governor, Himachal Pradesh is pleased to formulate a Pig Breeding Policy for Himachal Pradesh with objective of introducing piggery related activities in Himachal Pradesh i.e. holistic development of piggery The State Pig Breeding Policy will focus on core issue of pig sector. breeding for sustainable growth of the Sector. The detail of the State Pig Breeding Policy at Annexure-A.

#### By order

Addl. Chief Secretary (AH) to the Government of Himachal Pradesh

Endst: No. as above

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Shimla-171002

July, 2019.

Copy is forwarded to the following for information and necessary action:-

- The Secretary to the Governor Himachal Pradesh Shimla-2.
- Pr. Accountant General (Audit), H.P. Shimla-3.
- The Sr. Dy. Accountant General (A&E), HP Shimla-3.
- All the Administrative Secretaries to the Government of H.P., Shimla-2
- 5. All the HOD's Himachal Pradesh.
- 6. All the Divisional Commissioners in Himachal Pradesh
- All the Deputy Commissioner Himachal Pradesh.
- The Private Secretary to the Hon'ble Animal Husbandry Minister, H.P.
- The Deputy Secretary (Chief Minister) to the Govt. of Himachal
- 10. The Deputy Secretary (Fin.Reg.) to the Govt. of Himachal Pradesh w.r.t. U.O. Fin(C) B(15)1/2015 dated 10.07.2019.
- 11. The Director of Animal Husbandry, HP Shimla-5 w.r.t. their letter No. AHY-H(II)F-7-27/76-IV dated 12.04.2019.
- 12. All the Joint Directors/Deputy Director/Asstt. Director, Animal Husbandry through the Director of Animal Husbandry.

(Jagtamba Devi) Under Secretary (AH) to the Govt. of Himachal Pradesh Phone No. 0177-2880838

# The detail of the Pig Breeding Policy for the State of Himachal Pradesh.

#### PREAMBLE:

Himachal Pradesh with a land area of 55673 sq. km. is the home to a population of 6856509 people (Human Census, 2011, Govt. of India). The majority of farmers in Himachal Pradesh are landless or with a small land holding. The economic upliftment of the people had been a major challenge. However agriculture in the state suffers from certain limitations, especially in the production of food grains. One of the reasons is that the area under cultivation cannot be extended to any appreciable extent. Keeping in mind the target of doubling of Income of farmer, there is urgent need of some alternative source of income for farmer. This is where livestock rearing like pig farming can play a vital role in the state. Majority of the population living in Himachal being non-vegetarian and pig being a major source of meat, importance of pig in the socio-economic life is paramount. Although there is religious or social restriction on pork eating in some community, Himachal Pradesh has far more acceptability of pork as compared to neighbouring states. As such, among the livestock species, pig plays a very important role as a provider of quality protein.

The pig population in Himachal Pradesh is just 5033 and comprised preponderantly of indigenous and crossbred pigs. However, present pig population of the state is not proportionate with the high demand of pork in the region and the pig husbandry has not been exploited as income generating opportunity for poor farmer in Himachal. Pigs grow faster than any other animals. They have higher feed conversion efficiency. They can convert all types of inedible feeds, forages, certain grains by-product obtained from mills, damaged feeds, meat by-products, garbage etc. into valuable, nutritious and delicious meat. Pig meat is also one of the most nutritious and tasty meat. It is higher in fat and energy and lower in water content.

Well targeted interventions to improve pig production could deliver significant livelihood benefits for landless farmers and marginalized groups in the region. Pig farming business can be a great income opportunities for the small and landless farmers, unemployed educated or uneducated young people and for the rural women of Himachal Pradesh.

By providing livelihoods and food security, pig sector can ensure sustainable growth of the state. This is achievable only if a directional state pig breeding policy is in place, and measures are taken for its implementation. State Pig Breeding Policy will focus on core issue of pig breeding for sustainable growth of the sector.

#### 1. Objectives:

- 1. Establishing Pig Husbandry in the state of Himachal Pradesh with holistic development of piggery sector with respect to breeding, feeding, management, housing, value addition and marketing. The target will be to improve the integration and position of local farmers and entrepreneurs into a pig-production and marketing value chain.
- 2. Genetic improvement of local/non-descript animals by crossbreeding with germplasm of desired level of exotic inheritance.
- 3. Establishing the breeding infrastructure and support mechanism to propagate elite swine germplasm in the state.

#### 2. Breeding Policy:

- 2.1. Recognition and Conservation of Indigenous Germplasm:
  - 1. Indigenous pig breeds at farmer level will be identified and such Prized/Pedigreed animals will be propagated only to interested farmers who want to keep local germplasm.

2. No crossbreeding will be allowed to farmer's field for these prized animals.

3. Separate rates and incentive from the state department may be provided to such farmers.

### 2.2. Cross Breeding:

Breeding with Exotic Germplasm:

1. Import of exotic germplasm in the form of live animals specifically of Large White Yorkshire and Landrace breeds from reputed source after all bio-security checking.

2. Development of breed-specific nucleus farm of imported germplasm for subsequent use in crossbreeding programme.

#### 3. Breeding plan:

- 3.1 Nucleus Farm: Nucleus farm may be of pure exotic breed or well developed crossbred/indigenous breed.
  - 1. Nucleus farm of pure exotic breed like Large White Yorkshire and Landrace breeds can be established in Himachal Pradesh.
  - 2. Crossbred animals of desired level of exotic inheritance will be maintained. Crossbreeding will be restricted to 50% level of exotic inheritance. However, the level of exotic inheritance may be increased in state-specific breeding programme. In case of nucleus herd of pure animals, mixing/crossing of germplasm will be restricted.
  - 3. Minimum 30 breedable sows unit will be maintained with a sex ratio of 1:3 and thus 10 sires (2 sires from each 5 unrelated sire lines) need to be maintained by each of the unit.
  - 4. Selection of male animals will be based on weaning weight (best 25%) and 8 month body weight (best 5%), based on two stage sequential selection. Selection of female animals will be based on dam's litter size at birth (7) and weaning weight (best 25%) and number of functional teats (at least 6 pairs of functional teats). However, these can be changed as per performance of crossbred animals.
  - 5. Centralized data recording system will be initiated. Generation wise genetic evaluation will be carried out to estimate the response to selection. The overall genetic gain due to selection, selection differential and heritability may also be calculated.
  - 6. To avoid Inbreeding, replacement of boars will be done at regular interval of 2 years of productive herd life. Sire exchange programme among the farms will also be helpful to reduce the inbreeding effect. Culled male animals will be castrated before selling to avoid indiscriminate breeding.
  - 7. Three number of farrowing per sow need to be recorded. Three farrowing par sow should be completed in 2 years.

- 8. Weightage of selection need to be given on litter size and weight at birth and weaning.
- 9. Besides routine productive, reproductive, adaptive and carcass traits lifetime production traits will also be recorded.

# 3.2 Multiplier and Farmers' Farm:

- 1. Multiplier farm will maintain grandparent (GP) and parent (P) stock of desired Variety. The replacement (GP and P) stock of multiplier farm should be made available from nucleus farm. Multiplier farm should produce desired animals for propagation to farmer's field.
- 2. Breeding plan for farmer's field should be separate with that of nucleus and multiplier farm. They are only to make inter-semating among the developed crossbred animals.

No indiscriminate crossbreeding will be allowed at farmers' field.

## 3.3 Mating system:

All the breeding propagation activity would preferably follow Artificial Insemination (AI) practice. To achieve the target the State level Multiplier farm must have a training centre for the local farmers including modest facility/laboratory for semen collection, evaluation and preservation. However, natural mating in some cases may also be adopted based on infrastructure. Selection of boars in breeding programme should be based on following points:

- 1. The breeding boars require a recorded pedigree, a quality certificate for the breed issued by the authority for boars used for Artificial Insemination /natural mating.
- 2. The boars used for Artificial Insemination must be quarterly performance tested for semen quality.
- 3. The minimum area for keeping a breeding boar is 5 m2 for the local breed and 6 m2 for the exotic breed.
- 4. The maximum frequency of use of boars is 2 times a week for Artificial Insemination boars younger than two years, 3 times a week for Artificial Insemination boars older than 2 years, and 3 times a week for natural mating boars.

- 5. The earliest age of use for Artificial Insemination or natural mating is 8 months for local boars and 10 months for exotic boars.
- 6. Artificial Insemination boars will not be used for more than 3.5 years, and natural mating boars for not more than 3 years.
- 7. The reports on the quality of these boars shall be annually sent to Department of Animal Husbandry, Dairying and Fisheries (DADF, Govt. of India) for evaluation.
- 8. Boars will be vaccinated against swine fever, pasteurellosis, foot and mouth disease and other diseases as regulated.
- 9. A certification system should be implemented step by step for better quality breeding boars and sows for organized farms which can be recognized as certified breeding animals.

#### 3.4 Culling:

Bad/unproductive animals will be eliminated from each generation. Animals alongwith its family with specific genetic disorders should be eliminated from the breeding programme.

# 3.5 Traceability and disease control:

A systematic process of identification, registration and recording of animals would be followed to keep track of the individual animals. Specific system would be develop for pig disease surveillance and monitoring.

## 3.6 Capacity building:

- 1. Training of farm managers/large scale entrepreneurs on breeding management.
- 2. Regular/refresher training for technical personnel, para-vets and livestock service provider.
- 3. Training on semen collection and Artificial Insemination to farmers/service provider.

## 3.7 Infrastructure building:

Apart from the basic infrastructure, attention will be paid to provision of following facilities:

- 1. Provision would be kept for import/purchase of advanced machinery for feeding and watering.
- 2. Development/provision of infrastructure at farmer's field for climate resilient housing for pigs.

- 3. Establishment of a bacon factory in the State would reduce the transportation cost by rail and boost piggery in the State.
- 4. Value addition of pork and pork-products should be promoted for better profitability of the farmers.
- 5. Cooperative based market chain would be developed.
- 6. A specific quarantine facility would be developed for import of animals.

## 3.8 Subsidies and other financial support:

The policy would provide space for private sector to invest in the State for establishment of medium and large scale commercial farms of outstanding exotic pure pig breed(S) using state-of-art technology targeting potential export markets. This would generate more income and create employment avenues for youths.

The policy advocates stronger linkage of the State Animal Husbandry Department and other stakeholders like the State Veterinary College and also with national Research Centre located in the state. In addition the linkage with line departments like Department of Rural development and Panchayati Raj and Department of Industries will also help in implementation of projects.

State Government would help in developing suitable mechanism for the following:

- 1. Easy bank credit facility.
- 2. One time subsidy for smallholders purchasing breeding boars.
- 3. Annual subsidies for using Artificial Insemination services.
- 4. One time subsidy for Artificial Insemination service providers.
- 5. One time subsidy for waste management system.
- 6. Subsidies for the import of Grand Parent and Parent stocks.
- 7. Price subsidies for indigenous pork producers.
- 8. Subsidies for infrastructure development.
- 9. Tax holiday for specific period for large scale commercial pig farms.

# 3.9CLUSTER APPROACH AND VERTICAL INTERGENETATION:

It is always good to rear a particular type of animals in some well defined and delineated areas i.e. cluster. Depending upon suitability and farmer's preference different clusters would be identified for different genotypes of pig. The Department of Animal Husbandry would identify such clusters. The policy therefore suggests encouraging and promoting of cluster approach in pig production system in the state.

Once clusters are defined, all out efforts would be made to integrate all components of successful commercial pig venture. It would be ensured that all the input like availability of seed (piglet/semen), feed, health coverage support, slaughter house with processing and packaging etc. are made readily available at hand to the pig Farmers. Also proper linkages for financing and technology support to producers (backward linkage) and market linkage (forward linkage) are established.

# 4. REVIEWING THE POLICY:

The present breeding policy will be periodically revisited and reviewed after every five years by a state level monitoring committee.

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