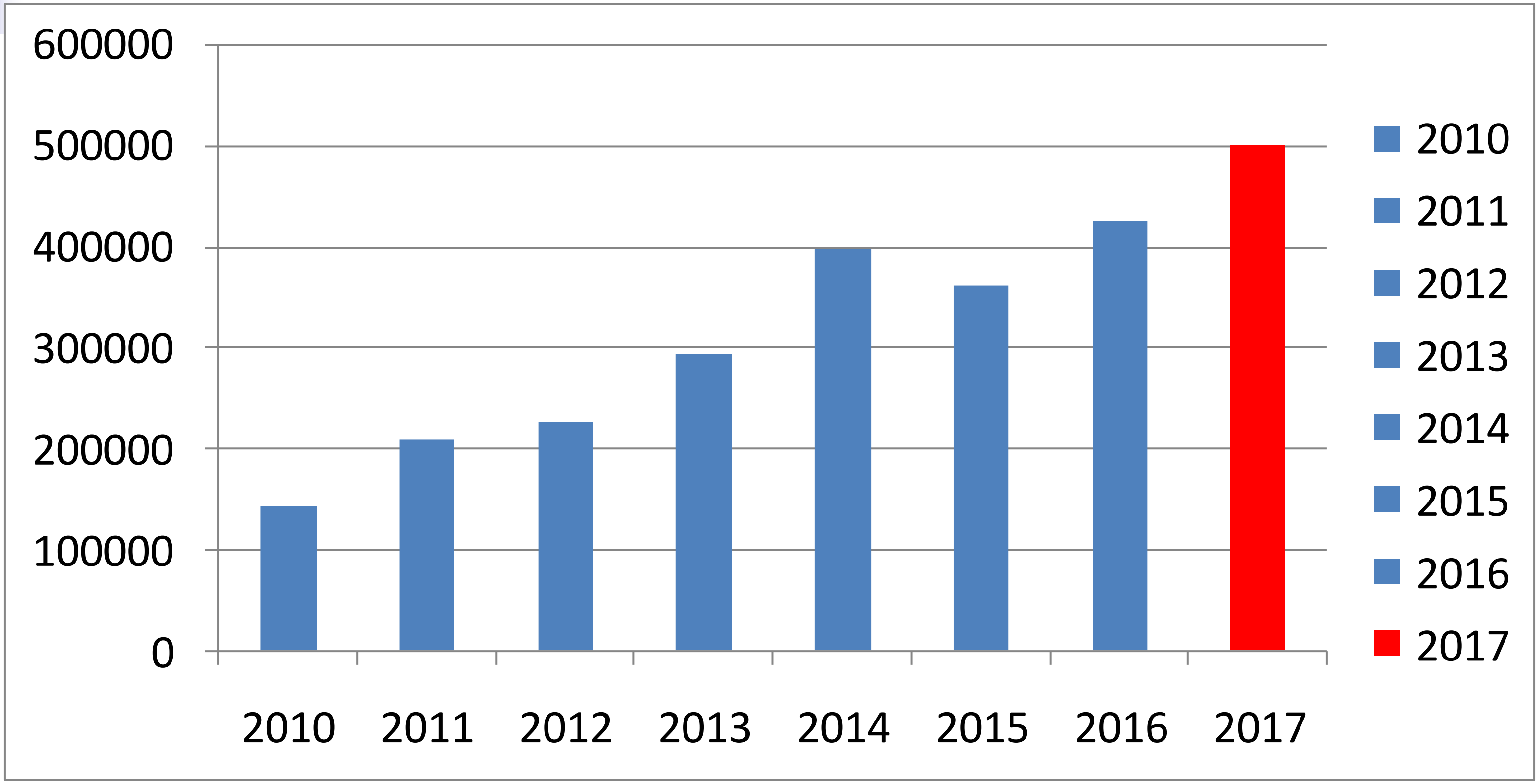
The Status & Potential of Shrimp Aquaculture in India

Ravi Kumar Yellanki
Vaisakhi Bio-Marine (P) Ltd, India.

Indian Shrimp Production



Strengths

- Stringent regulations for broodstock imports, quarantine and usage.
- Farming spread over several states on east and west coasts of the country.
- Strict monitoring of hatcheries & Farms by CAA
- Trained man power.
- Broodstock multiplication center and availability of SPF broodstock within the country.
- Capacity to handle 800,000 tons.

Weaknesses

- Absence of domestic market – lack of cold chain infrastructure.
- Fragmented farming- bio-security threat.
- Continuous stocking- no respite from WSSV.
- Stagnant creeks and low tidal amplitude.
- Lack of support from banks & financial institutions.
- unaffordable insurance cost.

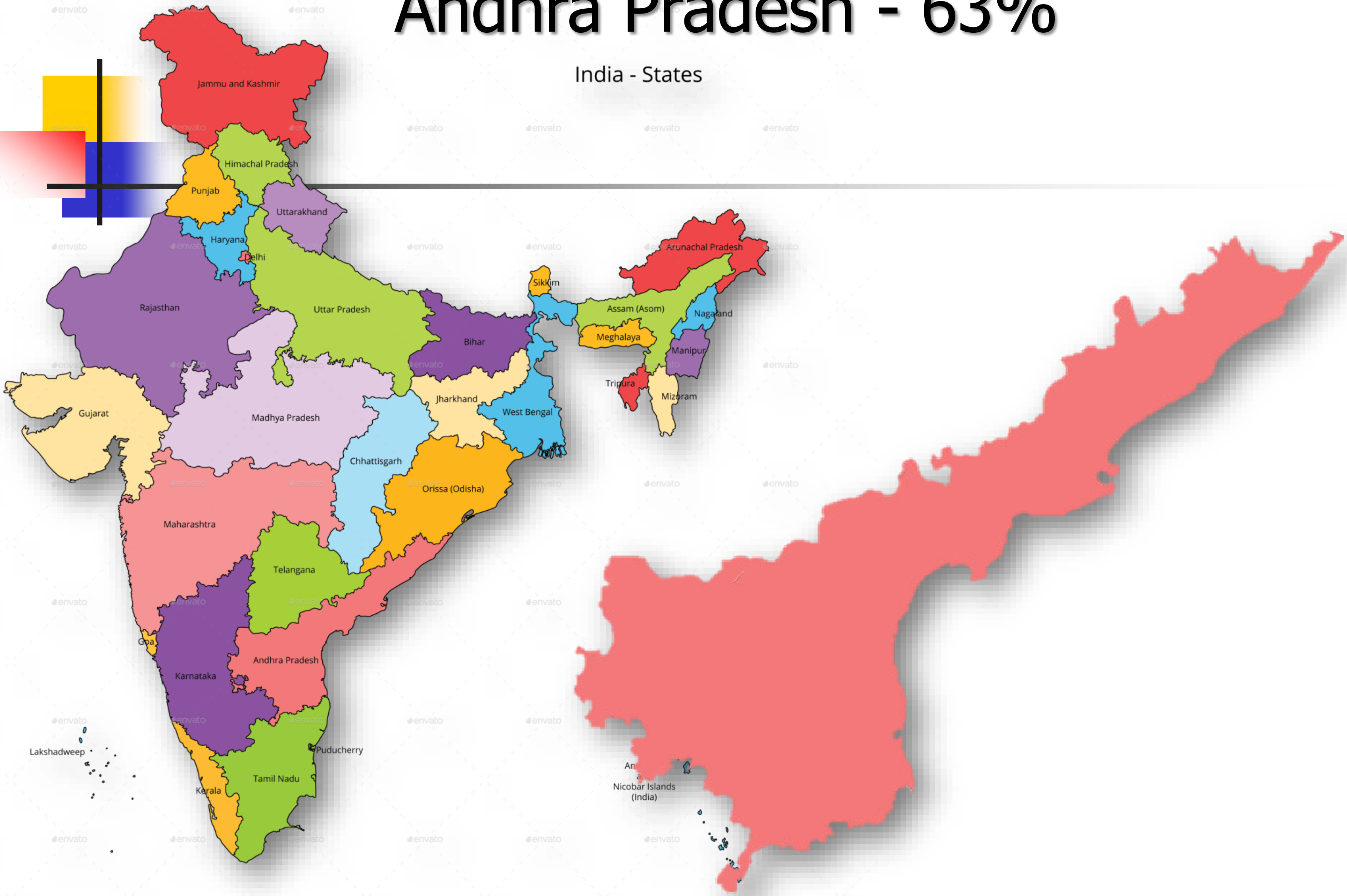
Opportunities

- Huge untapped potential areas.
- Domestic Market- burgeoning population and demographic dividend.
- Room for value addition.
- Several indigenous species.
- Room for more BMCs and NBCs

Threats

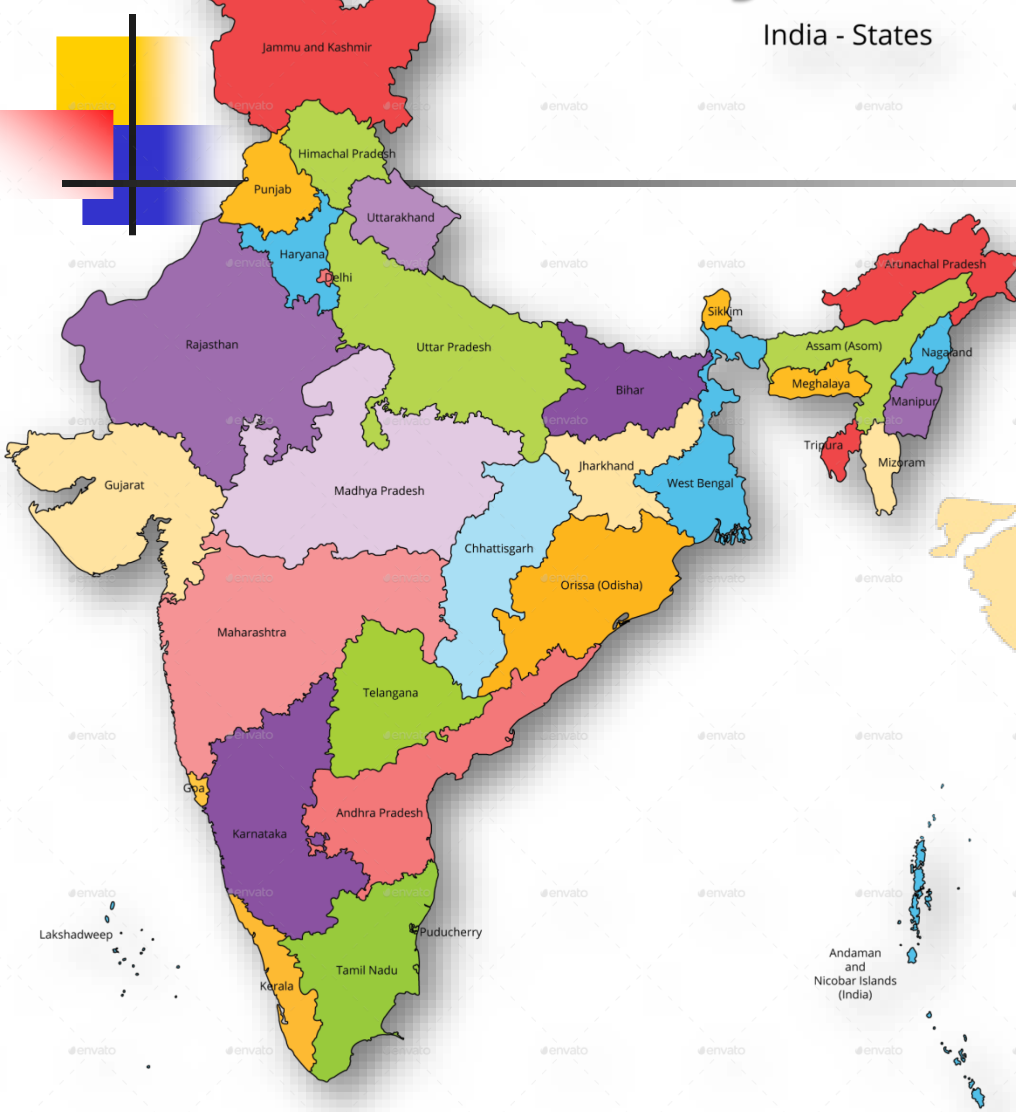
- Emerging diseases.
- Export rejections for antibiotic residual loads.
- Possible usage of pond raised broodstock during peak season.
- Currency fluctuations – strengthening of rupee.
- Non tariff barriers.

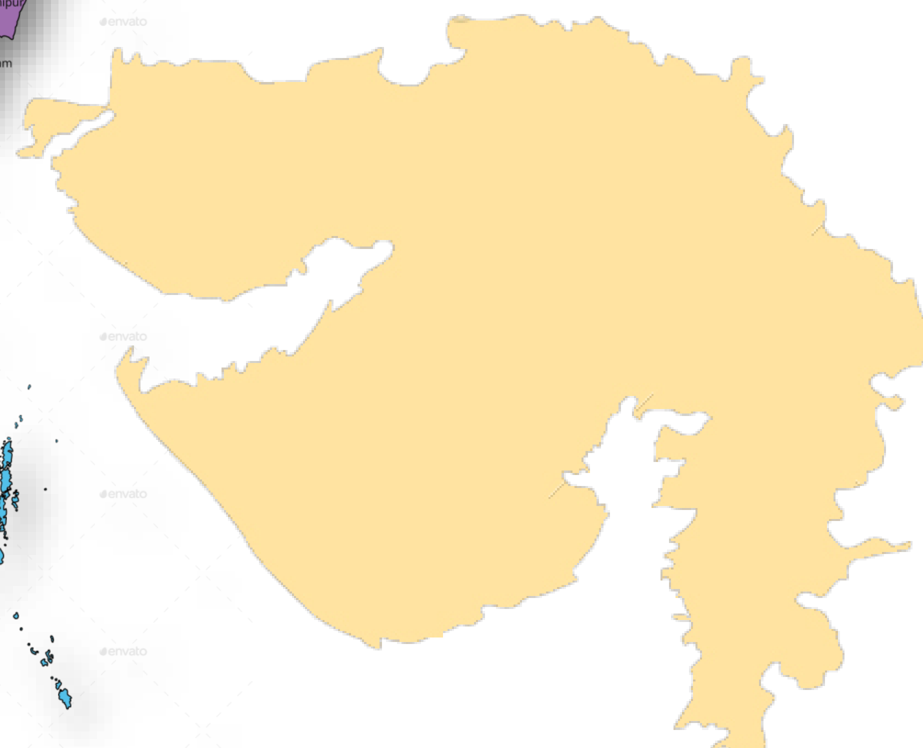
Andhra Pradesh - 63%



West Bengal – 11%

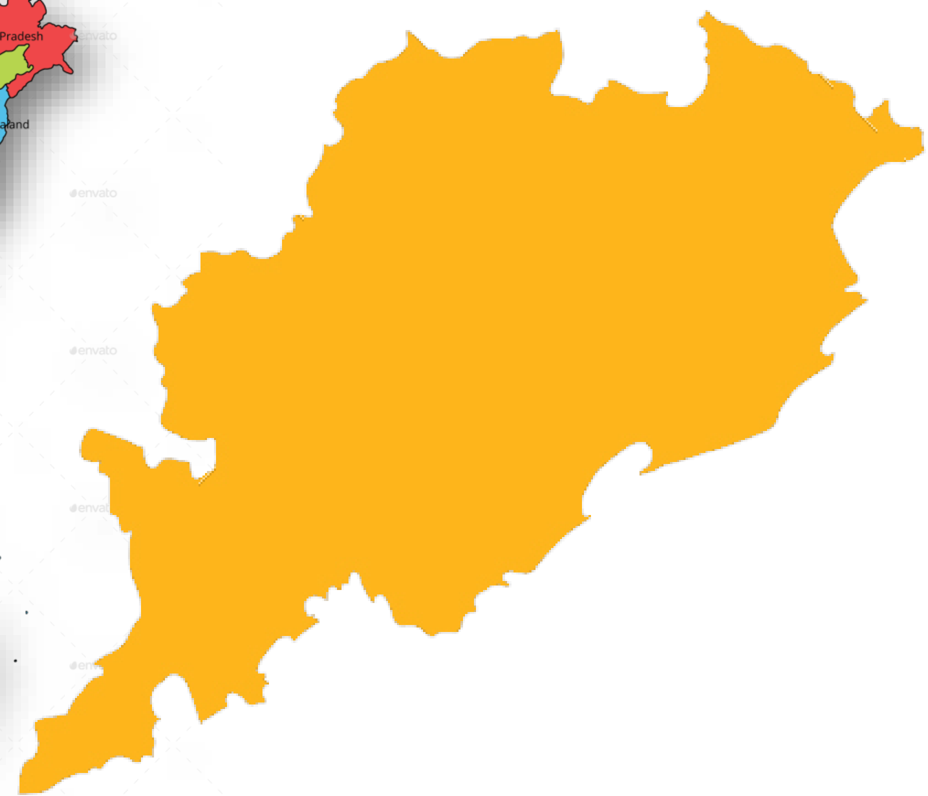
Gujarat – 9.5%


India - States
Jammu and Kashmir
Himachal Pradesh
Punjab
Uttarakhand
Haryana
Delhi
Arunachal Pradesh
Sikkim
Rajasthan
Uttar Pradesh
Assam (Asom)
Nagaland
Meghalaya
Bihar
Manipur
Tripura
Mizoram
Gujarat
Jharkhand
West Bengal
Madhya Pradesh
Chhattisgarh
Orissa (Odisha)
Maharashtra
Telangana
Goa
Andhra Pradesh
Karnataka
Lakshadweep
Puducherry
Andaman
and
Nicobar Islands
(India)
Tamil Nadu
Kerala

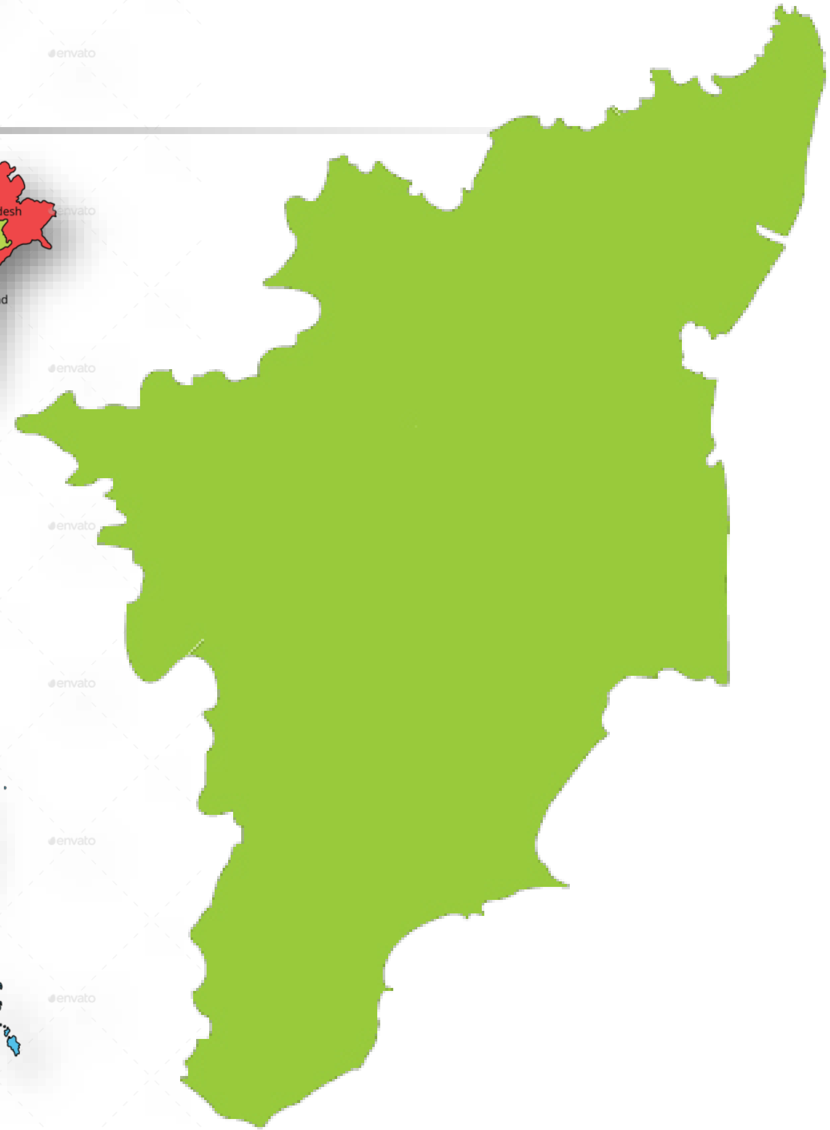


Orissa – 7%

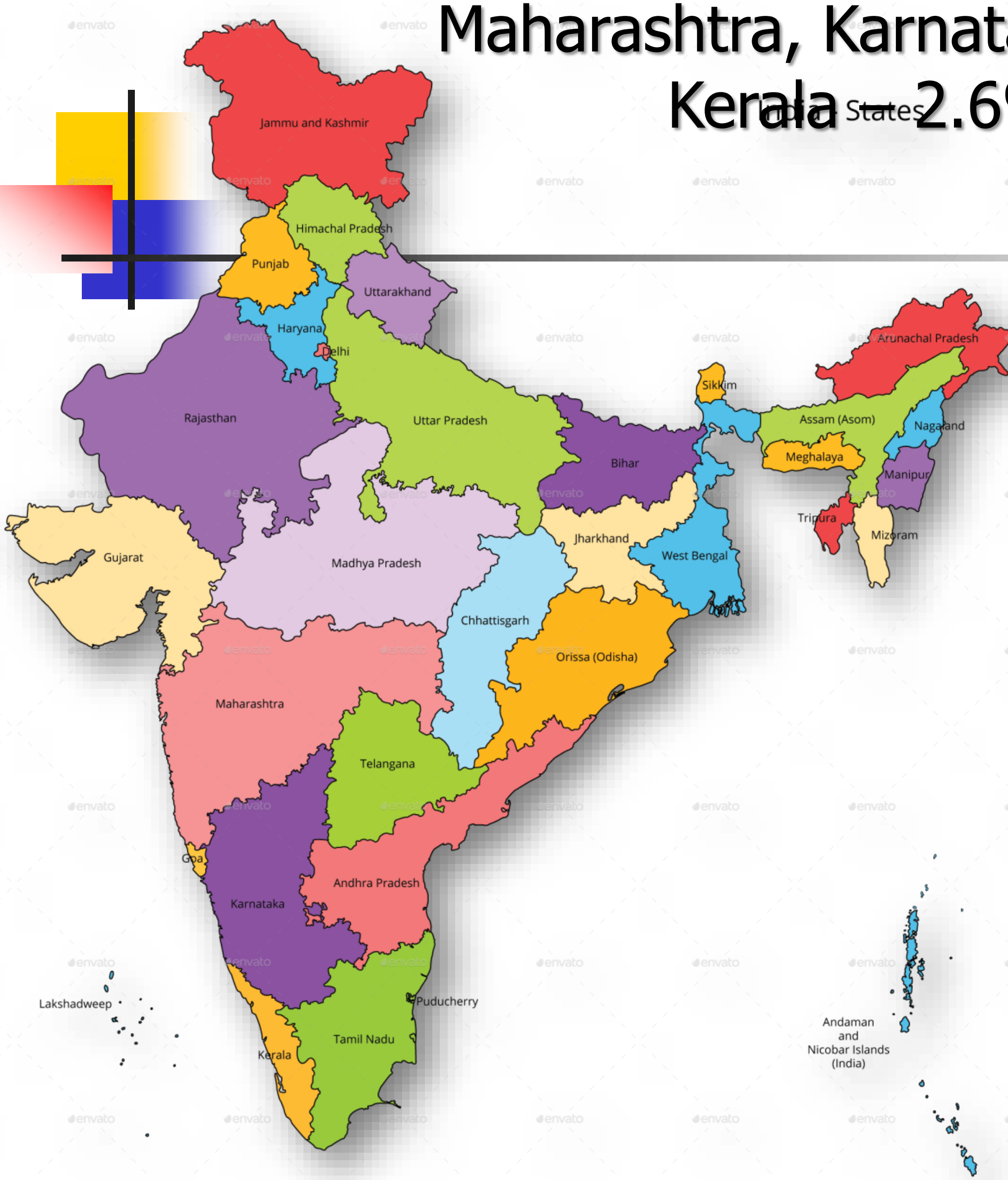
India - States

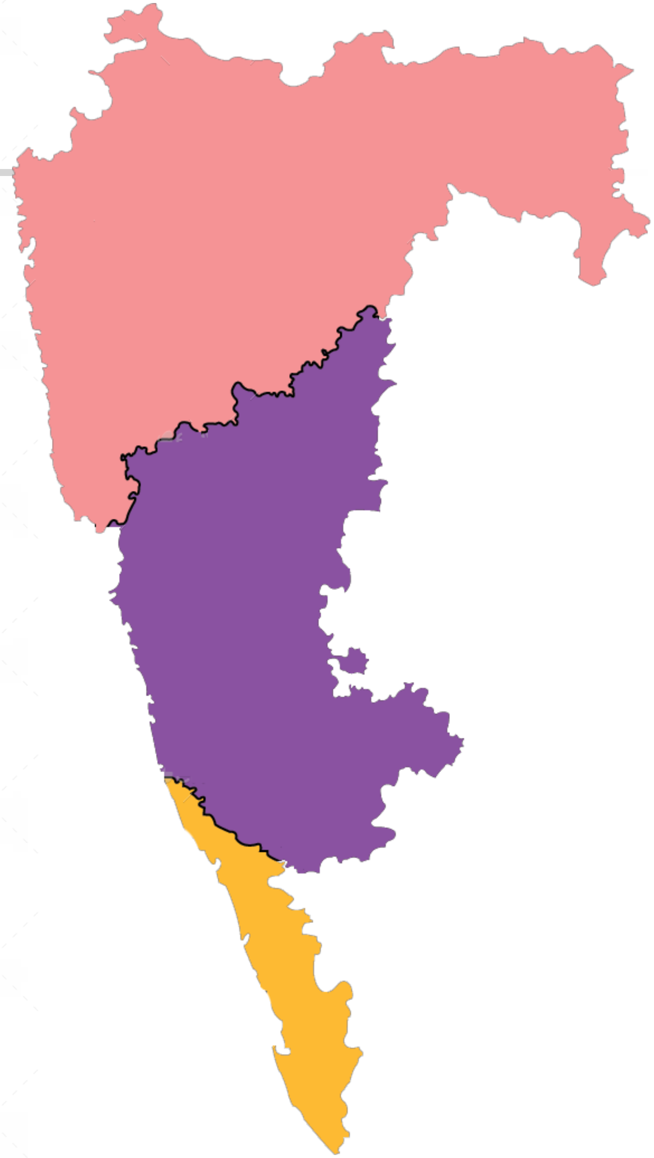


Tamilnadu – 5.7%



Maharashtra, Karnataka,Goa & Kerala – 2.6%





Brackish Water Potential in the emerging states

State	Potential Area Ha	Area Under culture Ha
West Bengal	405,000	50,000
Gujarat	376,000	8500
Odisha	32,000	9500

Super intensive culture systems on the coast

- Huge opportunity to establish farming on the coast.
- Coast line of India -7517 km.
- Need to look at the Indonesian farming models.
- Could be a good growth engine.
- CAA has to formalize special guidelines for such grow out systems.

Issues in Farming

- WSSV continues to be the major problem.
- White feces and running mortalities syndromes look to be more pronounced in summer months.
- EHP does not look to be all pervasive.
- In EHP affected ponds, the animals are growing after partial harvests.
- EMS is not yet reported in India.

Solutions for WSSV

- Crop holiday in Oct, Nov & Dec - Possible
- Area specific crop holidays - Probable
- Specific tolerant stocks for WSSV - Probable
- Nurseries - Plausible

Nurseries

- It brings a whole lot of benefits to the table.
- It would come in handy in countering the menace of WSSV also.
- Open or semi open nurseries in India might not offer the desired results.
- Majority of the farmers are small – need for commercial nurseries.
- Hatcheries can come up with closed – indoor-nurseries in the field and offer juveniles to the farmers –guide lines are required.

Changes needed in maturation

- Thorough rinsing of eggs & Nauplii.
- Change in disinfection procedures of maturation.
- Have to do away with usage of live feeds.

  - Live feeds should be pasteurized or at least frozen.
  - Need SPF polychaete production units.

Market

- Needs to reach out all the new markets.
- Needs to move up the value chain – "value addition".
- A comprehensive quality control program needs to be put in place- should cover the entire value chain.
- Needs to establish domestic market to be more stable even when global markets are down.

Positive indicators for domestic market

- GDP growth of 7% to 8% - rising income levels.
- Demographics – 1.2 billion population and 65% of it is below 35 years of age.
- Growing health consciousness.
- The present domestic market consists of wet markets and frozen shrimps in retail market which is very small- scope for a new segment to sell fresh shrimps in markets of vicinity.

Cold Chains

- Highly inefficient supply chain – lack of cold chain infrastructure.
- Cold Chain needs to start at the farm level and cover up to consumer level.
- Not many multinational companies have entered the food value chain.
- There is no single billion dollar company in food industry in India.
- Government has accorded high priority to establishment of cold chains.

Retail

- One of the largest sectors in global economy – USD 22.5 trillion.
- Size of Indian sector - $ 600 billion.
- Organized sector – 4%.
- A strong retail sector can give fillip to food processing sector.
- Indian retail sector is least saturated and less competitive.
- Government came up with a policy change recently- 100% FDI is allowed in multi-brand processed food retailing.

conclusion

- Concerted effort from policy makers, regulatory authorities and stake holders from the industry will enable Indian shrimp industry unleash the potential and touch one million tons of production.

Thank You….