The RAS Business Model The final hurdle? Maybe not . . .

Florida Shrimp Aquaculture Summit, Fort Pierce, Florida May 16 & 17, 2024





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HTH Full Spectrum Aquaculture

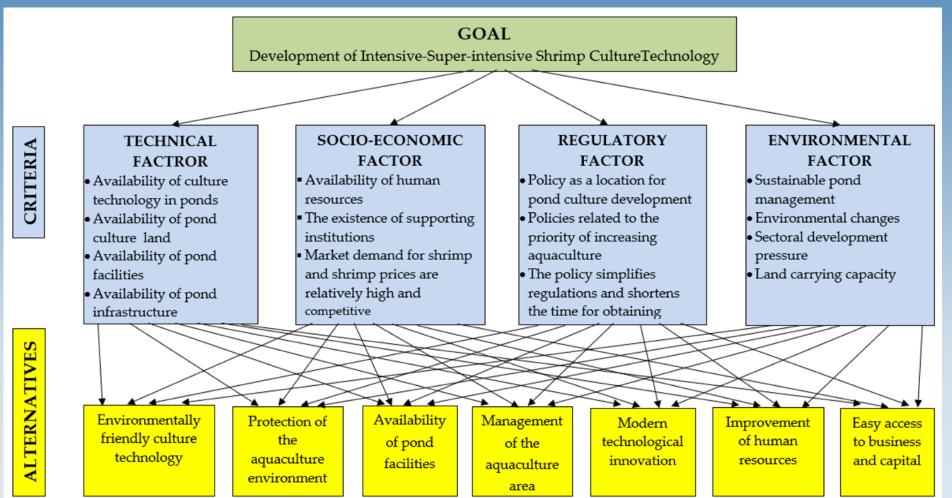
- Getxo, Basque Country, Spain
 - Jensen Beach, Florida
- •Zirconia, North Carolina www.HTHaqua.com www.FullSpectrumAquaculture.com



An Act of Congress: 26 (so far . . .)

Agricultural Marketing Act, Animal Health Protection Act, Animal Medicinal Use Drug Clarification Act, Coastal Zone Management Act, Endangered Species Act, Federal Food Drug and Cosmetic Act, Federal Insecticide, Fungicide, and Rodenticide Act, Federal Meat Inspection Act, Fish and Wildlife Coordination Act, Federal Water Pollution Control Act (Clean Water Act), Food Safety Modernization Act, Lacey Act, Magnuson-Stevens Fishery Conservation and Management Act, Moving Ahead for Progress in the 21st Century Act, Marine Mammal Protection Act, Migratory Bird Protection Act, Minor Use and Minor Species Animal Health Act, National Environmental Policy Act, National Historic Preservation Act, National Marine Sanctuary Act, National Invasive Species Act, Non-indigenous Aquatic Nuisance Prevention and Control Act, Outer Continental Shelf Lands Act, Rivers and Harbors Act, Toxic Substances Control Act, Triploid Grass Carp Certification Act. List compiled by National Aquaculture Association 2024

Goal, Criteria, Alternatives . . . a shrimp example





Aquaculture Venture Life Cycle Criteria...

TECHNICAL FACTROR

- Availability of culture technology in ponds
- Availability of pond culture land
- Availability of pond facilities
- Availability of pond infrastructure

SOCIO-ECONOMIC FACTOR

- Availability of human resources
- The existence of supporting institutions
- Market demand for shrimp and shrimp prices are relatively high and competitive

REGULATORY FACTOR

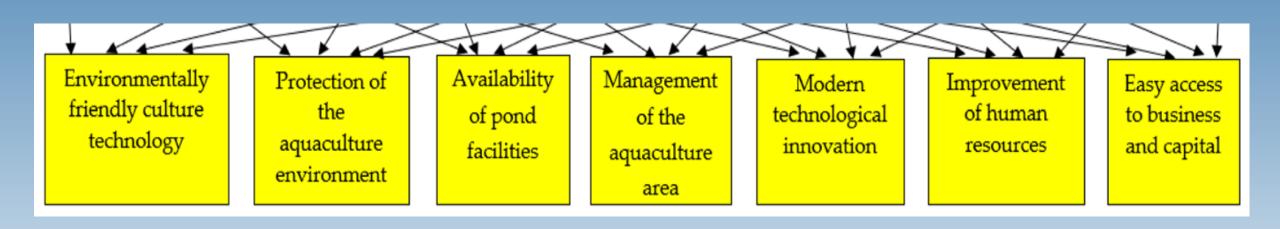
- Policy as a location for pond culture development
- Policies related to the priority of increasing aquaculture
- The policy simplifies regulations and shortens the time for obtaining

ENVIRONMENTAL FACTOR

- Sustainable pond management
- Environmental changes
- Sectoral development pressure
- Land carrying capacity



Alternatives ...





GOOD IDEA(S)

- We think we have a good idea.
- Let's investigate, do due diligence, ascertain feasibility



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- Let's investigate, do due diligence, ascertain feasibility
 - TAKE THE TIME TO ASCERTAIN FEASIBILITY



MARKET KNOWLEDGE

- Just because you can grow it is no reason to grow it!
- Local versus Commidity Markets: \$CALE vs **\$CALE**
- Set realistic sales price for target form factor and packaging.



MARKET KNOWLEDGE

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 - FADS ARE WHAT THEY ARE, FADS (short-lived)
- Local versus Commidity Markets
- Set realistic sales price for target form and packaging
 - ECONOMY OF \$CALE WILL NOT \$AVE YOU



TECHNOLOGY & FINANCING

- Technology an important part of the story
- Story sells the financing, financing sells the story
- Technology can limit or mitigate the Acts of Congress in play



TECHNOLOGY & FINANCING

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 - DON'T VENTURE OUT TO THAT BLEEDING EDGE
- Story sells the financing, financing sells the story
 - ASSURE THAT CAPITAL IS THERE TO IMPLEMENT THE RIGHT TECHNOLOGY, AT THE RIGHT SCALE, FOR THE RIGHT DURATION.
- Technology can limit or mitigate the Acts of Congress in play



PLANNING - Lack of planning is number one mistake that leads to failure. If it doesn't start right, it is delusional to think it will end right.

- Five major impacts of poor planning:
 - Poor time management
 - Poor definition of objectives
 - Budget doesn't work
 - Lack of support from stakeholders
 - Exposes project to unpredicted high risks and problems



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Aqua Venture Life Cycle



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- A comprehensive, multidiscipline project delivery team is required.
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- "Design is not just what it looks like and feels like. Design is how it works." (Steve Jobs)



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- Buy what you need.
- Assure you got what you paid for.
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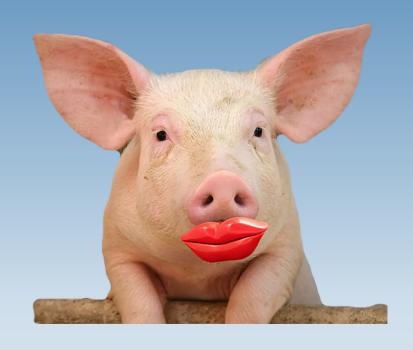
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The Choice is Yours...







Desired Results . . . Smart, Effective, Sustainable Operations







THANK YOU FOR YOUR ATTENTION



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