



GIFT tilapia - new Technologies in Aquaculture

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RESEARCH
PROGRAM ON
Fish

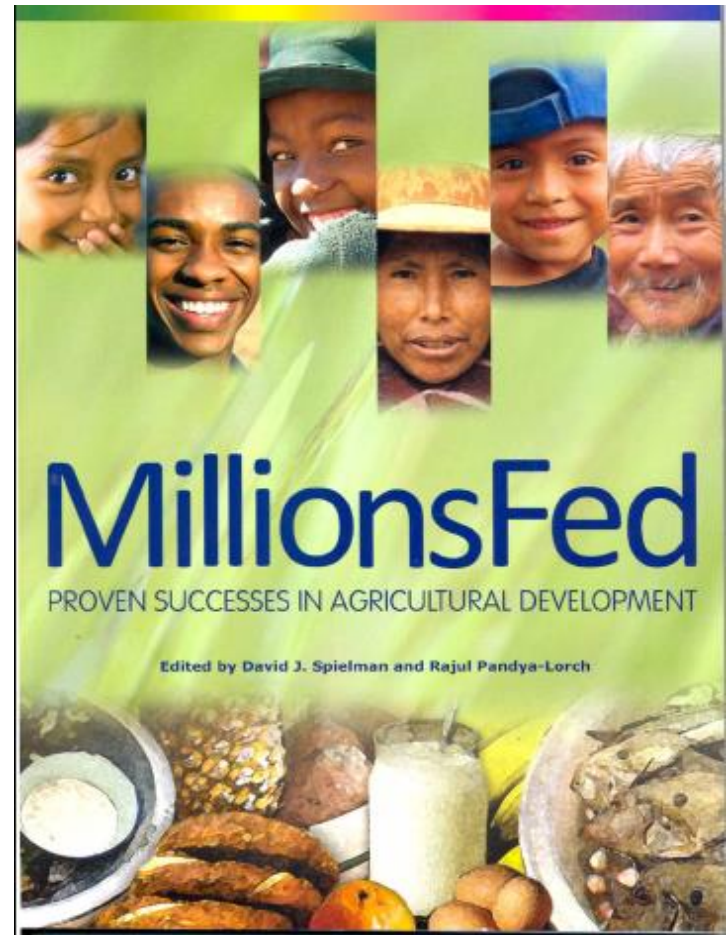
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WorldFish

WorldFish: Genetically Improved Farmed Tilapia (GIFT)

- Grows 50 to 80% faster, high survival
- ‘*GIFT-technology*’ used in other regions
- ‘*GIFT-technology*’ thought to underpin 50% of world tilapia production
- Tilapia most farmed fish globally after Chinese carps



GIFT technology dissemination



- GIFT from Philippines and Malaysia populations
- GIFT from Philippines population
- GIFT from Malaysia population
- GIFT from Malaysia for research purpose or no dissemination to local farmers

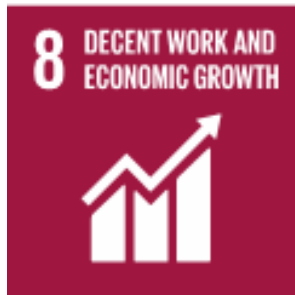


Present and future focus

- Creating a step change in performance
- Latest technologies
 - Genomic selection
- New resilience traits
 - Improved health
 - Growth under stress
 - Feed efficiency
- Global impact



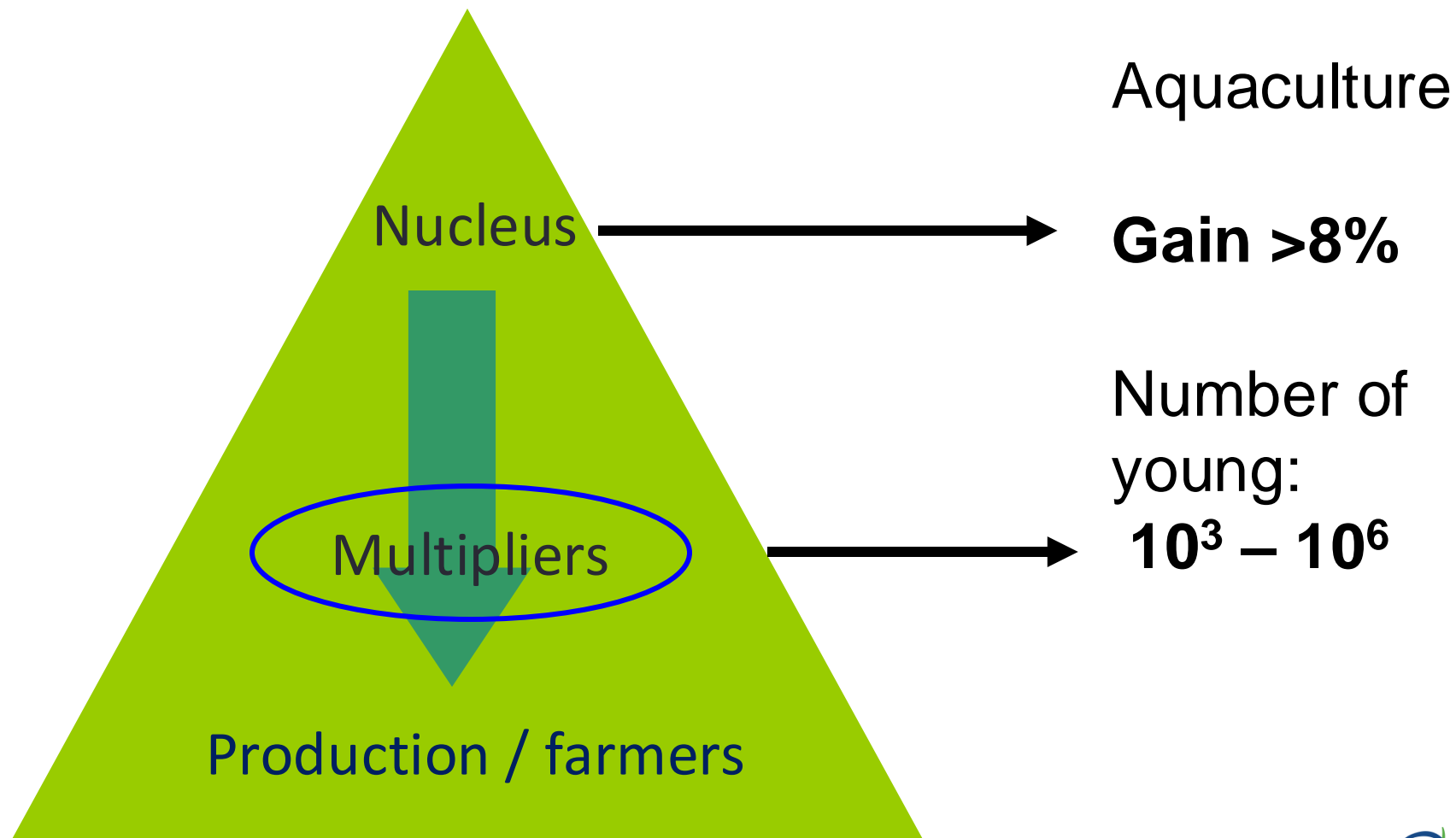
SDGs



Large potential cost savings and reduced environmental impact

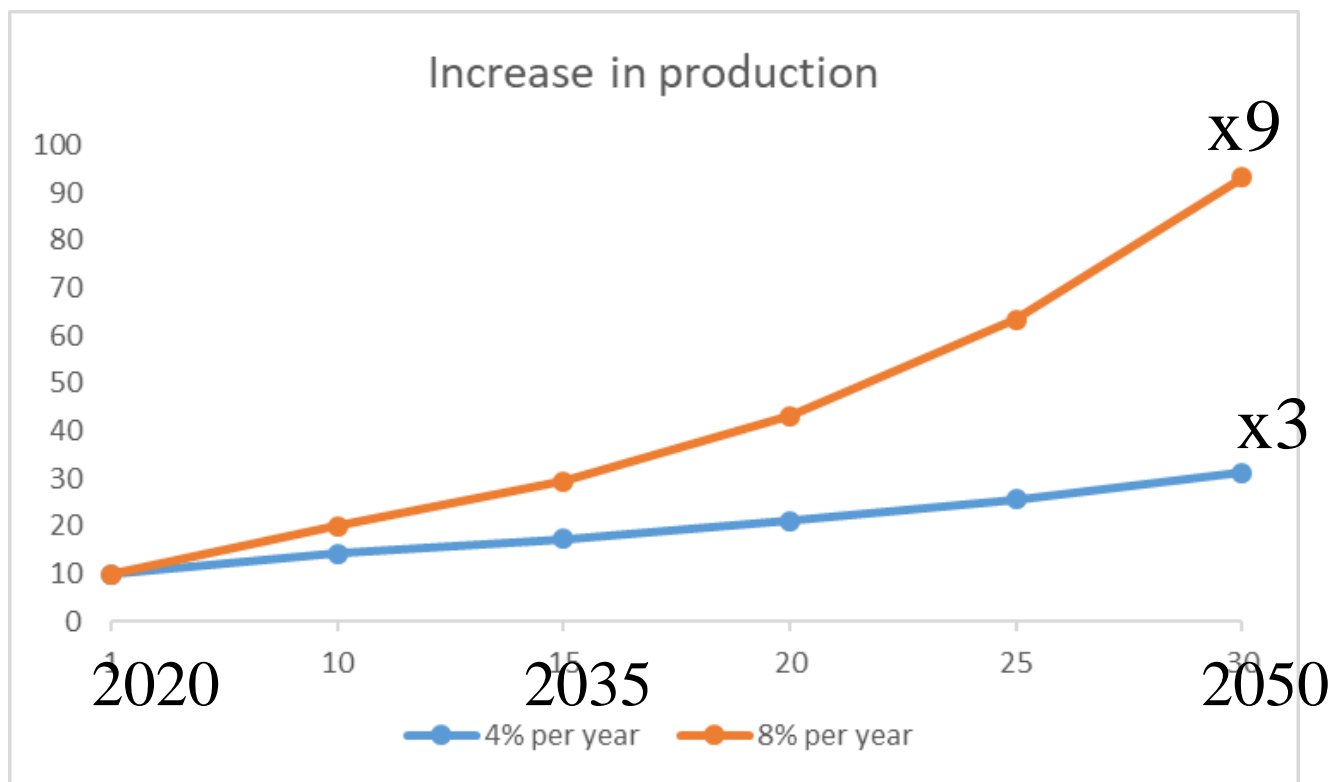
- Faster growth allows more flexibility in farming;
 - *Quicker return in investment*
 - *Greater range of market product*
 - *Production in a shorter season (resulting from environmental change; rainfall or salinity)*
- New tools to select for improved feed conversion ratio (FCR) has potential to
 - *Reduce feed costs, increases farm sustainability*
 - *Reduce environmental impact*

Selective breeding essential



Meeting goals requires a holistic approach

Doubling production by 2050- the genetics is there-
Is the connectivity and investment?



THANK YOU

