## **INVEST Coop-Indonesia**













### The Project:

#### Cooperative Solution for Small Producers

- Indonesia is the 2<sup>nd</sup> largest seafood producer in the world (FAO, 2014)
  - ▶ 70% from aquaculture
- Seaweed, Milkfish, and Shrimp (SMS) key in South Sulawesi
- Targeting Women and Men Small Aquaculture Producers (WMSAP)
  - Four regencies: Takalar, Jenponto, North Luwu, Bantaeng

# Inputs and Technical Assistance Provided to:

- Farmers (WMSAP)
  - Increase quality and quantity
  - Access to Markets
  - Finacial Services
- Co-operatives
  - New and Existing Groups
  - Stengthen Business and Services
- Enablers
  - Government
  - Private Companies

### Kevin Smith - CDF Volunteer: Environmental Sustainability Officer

#### My Background

- B.A. Anthropology (MUN), Certified Horticulturist (NCSU), Advanced Diploma: Sustainable Aquaculture (MI)
- Wetland and River Conservation
  - ► Freshwater habitat restoration
- Community Outreach and Development
  - Watershed cleaning and beautification

#### My Responsibilities

- Promote sustainable farming
  - Alternative floats
  - Best Aquaculture Practices
- Production cost monitoring
  - Input cost assessment
  - Profitability
- Waste management initiatives
  - Youth engagement
  - Government assistance/cooperation













Increasing Wealth and Food Security
through the Integrated Co-operative
Business Model

### **INVEST Co-op Indonesia**

### Lokakarya Pengelolaan Lingkungan Berkelanjutan dan Inisiasi Pengelolaan Sampah

Kabupaten Jeneponto, 11 Juli 2019



















# What is the biggest environmental challenge facing humans today?

#### HINTS:

- We are all part of the planet, part of the global ecosystem, and everything we do, can have a beneficial or a negative impact on the global ecosystem
- Are we moving towards a precipice of no return, where our food, our environment, and our lives will become unlivable?





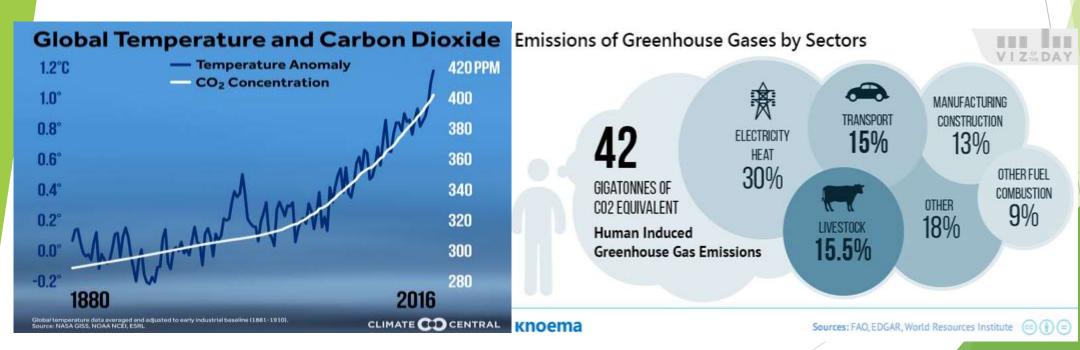




### What is the biggest environmental challenge facing humans today?

#### **ANSWER:**

Climate change as a result of our carbon economy, this includes waste production











### It is climate change and impacts on our food systems, our living conditions, our future on the planet



















# Waste Management is an Important Aspect of Climate Change Impacts

As humans, we waste a lot, and much of our waste impacts the environment.

Think about food waste, consumer waste, use of carbon economy, to name a few.

It seems the more we have for our comforts, the more we waste!











# Examples of solid waste management approaches - packaging / plastics - 3 Rs



Beach cleanups, recycling, and alternate packaging are all being done, including laws for plastics pollution. Is it enough?









# Solutions for solids waste management come from our YOUTH



There are no easy solutions for each society, only when we work together can we find solutions for all!









### The 4 R's - Examples

- Beach cleaning action (reduce - video)
- Use recycled or reusable bags - do not accept plastic bags
- Reusable food containers
   e.g., lunch boxes
- Tumblers for water and large water bottles (reduce)

















### Beach cleaning and awareness activities





- Community awareness increased by some, reducing plastics
- Some collection of garbage by DINAS environment, but not all committed in regencies
- Need new approach, using 4 R's









### The 4 R's - Examples

- Eco-floats examples of reducing plastics
- Waste bank for recycling plastic

















### **Alternative Floats (ecofloats)**

- Goal: reduce the amount of plastics in the environment. Replace cheap, degradable floats, with cost-effective, durable floats with improved practices
- Literally millions of plastic bottles end up on the shoreline and in the ocean each year















# **Waste Banks** Commitment

- Where do plastics go?
- There can economic incentive (2000+ IDR/kg)















## Who wants to be a climate hero?

- What can you do to be a climate hero?
- Remind your neighbours and family
- Develop waste bank with community leaders and government
- Be vocal in your community and follow up with local government!











### **Next Steps**

- Can we get commitment from DINAS and Villages to support environmental stewardship in local communities making efforts?
  - Plastic waste banks?
  - Support for recycling?
  - Alternative packaging?
- Plan to have additional community awareness sessions 8-12 July to engage broader community on the 3R's + 1 R
  - Youth participation
  - Government support









Environmentalism in Canada and Western Literature

- Precontact and Indegenous peoples
- ► Early European exploration
  - Samuel de Champlain (1567). Explorer and colonist.
  - Catharine Parr Traill (1802). Pioneer writer an botanist.
- Environmental movements divided into 4 waves:
  - Conservation
  - Pollution
  - Organization
  - Climate change





# The First Wave: 1800's- early 1900's Focus: Conservation

- ► Heavlily influenced by the forestry industry, who saw a risk for the decline of the "unlimited" resources they relied on.
- Also influenced by American conservation efforts
  - President Theodore Roosevelte and the North American Conservation Conference in 1909
  - Formation of National Parks and conservation areas
- Writings such as Walden (1854) by Henry David Thoreau and A Sand County Almanac (1949) by Aldo Leopald of key significance
- The writings of Canadain environmentalis Archibald Belaney (Grey Owl) in the 1930's helped popularize Canadian conservation movements

# Second Wave: 1960's-70's Focus: Pollution

- Environmentalism was no longer just for naturalists, and began to move into the cities
  - ▶ The message of conservation spread by authors such as Jacques Cousteau
- Formation of Greenpeace in British Columbia (1971)
- Concerns about air, water, and hazardous pollution grew as people began to feel the effects (acid rain)
- Canada began to become more involved with international environmental issues
  - ▶ 1972 UN Conference on the Human Environment
  - Convention on International Trade in Endangered Species
  - ► International Union for the Conservation of Nature and Natural Resources

# Third Wave: 1980's-1990's Focus: Organizations

- Global concerns for protecting and preserving the environment
- An increased willingness to work with cooperations and government to try to solve large problems
- ► A larger role of NGO's began
- Multipart agreements began to show progress in reaching environmentalist goals
  - British Columbia: The Great Bear Forest gained protection from overlogging through agreements made between the Canadian government, logging industry, and First Nations groups. A larger role of NGO's began
- Formation of Canadian Green Party (1983)

# Fourth Wave: 2000's - Present Focus: Climate Change

- Climate change emerged as the most critical environmental issue threatening the preservation of vunerable ecosystems and long term human survival
- Kyoto Protocol (UN action on climate change) ratified in 2002, including Canada but excluding the United States
- Challenges: Canada later withdrew from the agreement under the leadship of conservative government.
  - Reduced funding for environmental research and projects
  - Relaxing of laws regarding environmental assessment in industrial development
  - "Environmentalism has failed" David Susuki (Economy over Environment)
    - ▶ Blue Dot Campaign: Seeks to include the right to a clean environment as part of the Canadian Charter of Rights and Freedoms

### **Current Efforts**

- Renewed environmental focus under current government, but many challenges still persist
- Paris Agreement signed by Canada in 2016
- Regulation to ban single use plastics taking effect
- North American waste often exported to South-East Asia
  - ▶ Highlights the complexity of the recycling value chain
  - North Americans often assume that because they recycle there are no negative impacts
  - They don't consider what happens once their waste enters a "Blue Bin"

### Ecocristism in Literature

- Works of Antiquity: Humans live close to nature. Nature is to be feared and respected, but also conquered. Natural events are ascribed supernatural original.
  - Stories of flood and famine being associated with the wrath of Gods
- Works of Colonialism: The hero often fights against nature to bring civilization and reap from a great bounty.
  - Stories of the settlement of the New World (Pioneers, Cowboys and Indians)
- Works of Romanticism: Influenced by the Agricultural and Industrial Revolutions. Increased urbanization. A sense of loss by being removed from nature.
  - Stories of squalid urban life (Oliver Twist, 1839). The city is polluted and corrupt, but pastoral life promises something pure, innocent, and romantic
- Works of Dystopia: Present a grim future based on our past and current patterns of living within the environment.
  - Science fiction works such as Do Andriods Dream of Electric Sheep (1968) by Philip K. Dick