



# Education for Sustainable Development: The Case of Indonesia

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A sunset over the ocean with a silhouette of a traditional Balinese temple structure in the foreground. The sun is low on the horizon, casting a golden glow across the sky and reflecting on the water. The temple structure is dark and silhouetted against the bright sky. The foreground shows a rocky beach with some water. In the top left corner, there is a small yellow speech bubble icon.

**Size: 5,2 million km<sup>2</sup> (land and sea),**  
**Pop : 250,7 millions (2014).**

**13,466 islands ...**

 GDP per capita (2013) US\$ 3,475  
or US\$ 9260 (PPP)



**The largest Archipelagic Nation  
... 3.3 million km<sup>2</sup> sea ...**



# CULTURAL DIVERSITY



more than 300 ethnic groups live in Indonesia speaking not less than 700 languages and dialects



**The 6<sup>th</sup> wonder of the world**



**Mega bio diversity ...fauna**



# The Second largest bio diversity



**Mega bio diversity**



**... Flora ...**

# INDONESIA'S POPULATION PRESSURE

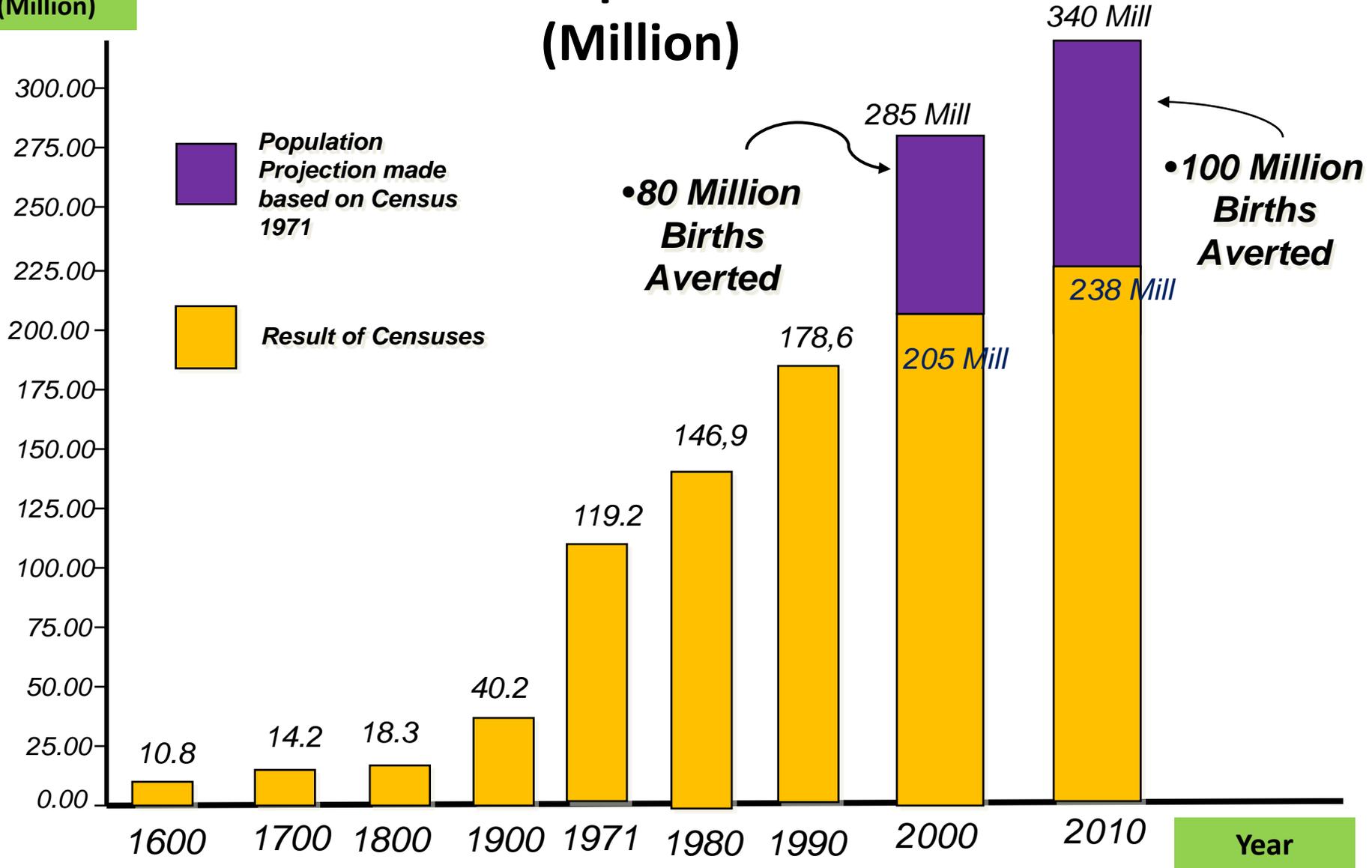




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Number of population (Million)

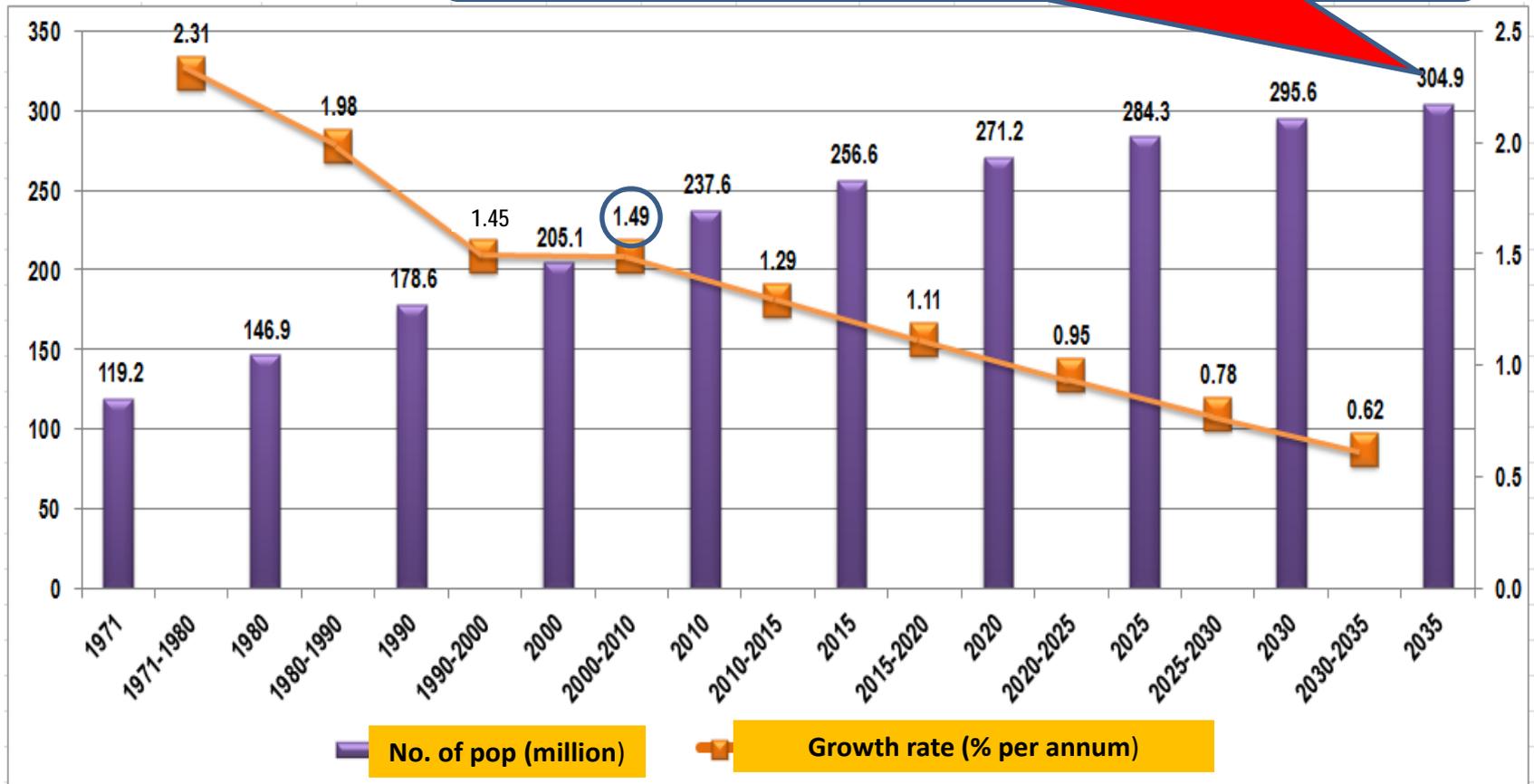
# Indonesia Population Growth (Million)



Source. Indonesia Statistics, Census

# Indonesia Population Growth, 1971 – 2010 & Population Projection 2010-2035

**If growth rate remains 1.49% p.a. as between 2000-2010, population size will rise to 343.96 million**



**Note: Backcasting 2010-2000 shows growth rate between 2000-2010 to be 1.52% per annum**

**Source: Statistics Indonesia et. al 2014, Indonesia Population Projection 2010-2035**

# Policy Responses

## 1. President Instruction to Revitalize Family Planning, 2007



# Policy Responses (cont'd)

2. The new law no. 52 year 2009 on Population Dynamic and Family Development, to strengthen the legal basis for:
  - Establishing the new institution of Regional Population and Family Planning Offices at provincial as well as regencies and municipalities.
  - Expanding program to include activities beyond family planning program, i.e Family Resilient Program
3. Restructuring the National Coordination Family Planning Board into the National **Population** and Family Planning Board
4. Establishment Medium Term Development Plan providing a strong legal bases for revitalizing FP
5. Increasing national and local budget to support the population and family planning program
6. Developing National Grand Design of Population and Development

# Policy Responses to DESD

The President of Indonesia showed his highest commitment by launching the Decade on ESD and facilitate an agreement between the Ministry of Education and the Ministry of Environment to promote ESD.

The government appoint a senior academic as National Coordinator for ESD (NCESD) to bring different ministries together to enhance cross-sectoral cooperation and facilitate the integration of ESD in different sectors

Curriculum developers and officials from the Ministry of Education have been trained in the implementation of ESD within the education system.

The NCESD has made continuous efforts to magnify ESD visibility, through media engagement and participation in discussions as well as the organization of workshops.

The National Commission for UNESCO in Indonesia set up the office of the NCESD and is playing a very active role at policy and governmental levels.



# A National Strategy for the implementation of ESD in Indonesia

- To ensure that policy, regulations, and operational frameworks support ESD
- To promote ESD through formal, non-formal, and informal learning
- To equip educators with the competence to include ESD in their teaching
- To ensure that adequate tools and materials for ESD are accessible
- To promote research on and development of ESD
- To strengthen cooperation on ESD at all levels



# Integrating ESD in National Education System

- **The government of Indonesia through its national education system emphasizes that education should empower each and every student to have concerns on his/her social and physical environment.**
- **Its education policies from basic to higher education are formulated accordingly to implement ESD.**
- **The following are the program model of ESD in Indonesia:**

# early childhood education

- Trainings for ECE **teachers** on EfSD for early childhood:
  - Clean and healthy living
  - Providing a wider perspective on EfSD for ECE teachers
- Education for noble character for early child golden age
  - Habit, attitude





# EfSD programs in primary and secondary education

## SCHOOL ENVIRONMENT

- **Green & healthy** school program (ADIWIYATA):
  - Creating an eco-friendly atmosphere at school
  - Reduce-reuse-recycle programs
  - Environmental awareness/green school
- Kantin kejujuran, “**honesty shop**”

## CURRICULAR ACTIVITIES

- Climate change for classroom
  - Imbedding climate change into curriculum
- EfSD **curriculum development**, imbedded to subject matters
- Environmental program in vocational education (in collaboration with Swiss Contact), esp. in energy and resource efficiency

# EfSD programs in primary & secondary education

## SCHOOL MANAGEMENT

- School **headmaster** competition on EfSD
  - Promoting headmaster awareness on EfSD
  - Training for teachers on EfSD

## CO & EXTRA CURRICULAR

- Boys Scout (Pramuka)
  - Environmental care & passion, self disciplines, solidarity
- School Health Unit
  - Healthy students and school environments.
  - Clean school, checking students' clean-hand, and little doctors program.
- Bike to school







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# EfSD programs in tertiary education

- Green campus program: waste management (3R), bike to campus, greenmetrics
- Establishment of Environmental Research Centers in 48 universities
- Research clusters addressing environmental issues: renewable energy, climate change, disaster mitigation, food security, poverty alleviation, health, etc.
- Community services: community empowerment, SCS – CEL, foster village, etc.

# Examples of EfSD at University:

## Academic

### Graduate Programs related to sustainable development:

- Graduate Program in Environmental Science
- Master program in Micro hydro power system (since 2002)
- Master program in Pollution prevention (since 2003)
- Master program in Water Resource Management (2000)
- Master program in Municipal Solid Waste Treatment and Management (2004, in cooperation with local government)
- Master program in Disaster Management in collaboration with Tokyo & Kyoto University (since 2002)
- Master program in Environmental, Water & Waste Water Engineering (being developed with DAAD)



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# Community empowerment

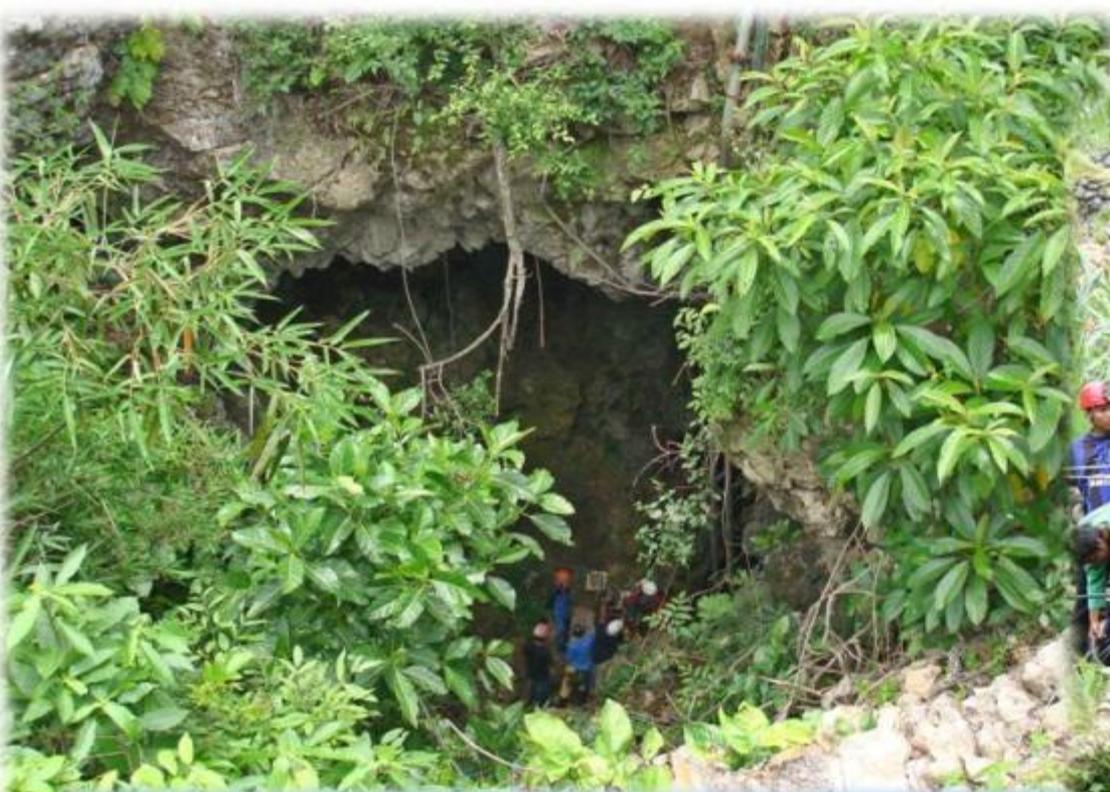
- **Student Community Service – Community Empowerment Learning (SCS-CEL).** Some example of SCS-CEL program addressing climate change issue, such as
  - Incorporating global climate change education for local community.
  - Water harvesting for dry remote area through utilization of solar cell.
  - Community empowerment related to rainfall harvesting for fulfilling community basic needs.
  - Village self-sufficient energy through utilization of biomass and manure as alternative fuel (biogas).
  - Micro-hydro for community in remotes areas.
  - Environmental conservation for rural areas (land, forest, coastal areas, river bank)
- **Applied research**
  - Waste refinery converting municipal solid waste into valuable products such as energy and bio-fertilizer.
  - Micro climate reclamation in coastal areas.
  - Eco-hydraulic, eco-product and eco-efficiency.



# Bringing clean water from underground river







Bringing clean water from underground river using hydraulic pump powered by solar panel



...turning biomass



the team

...using simple tools...

...into clove oil



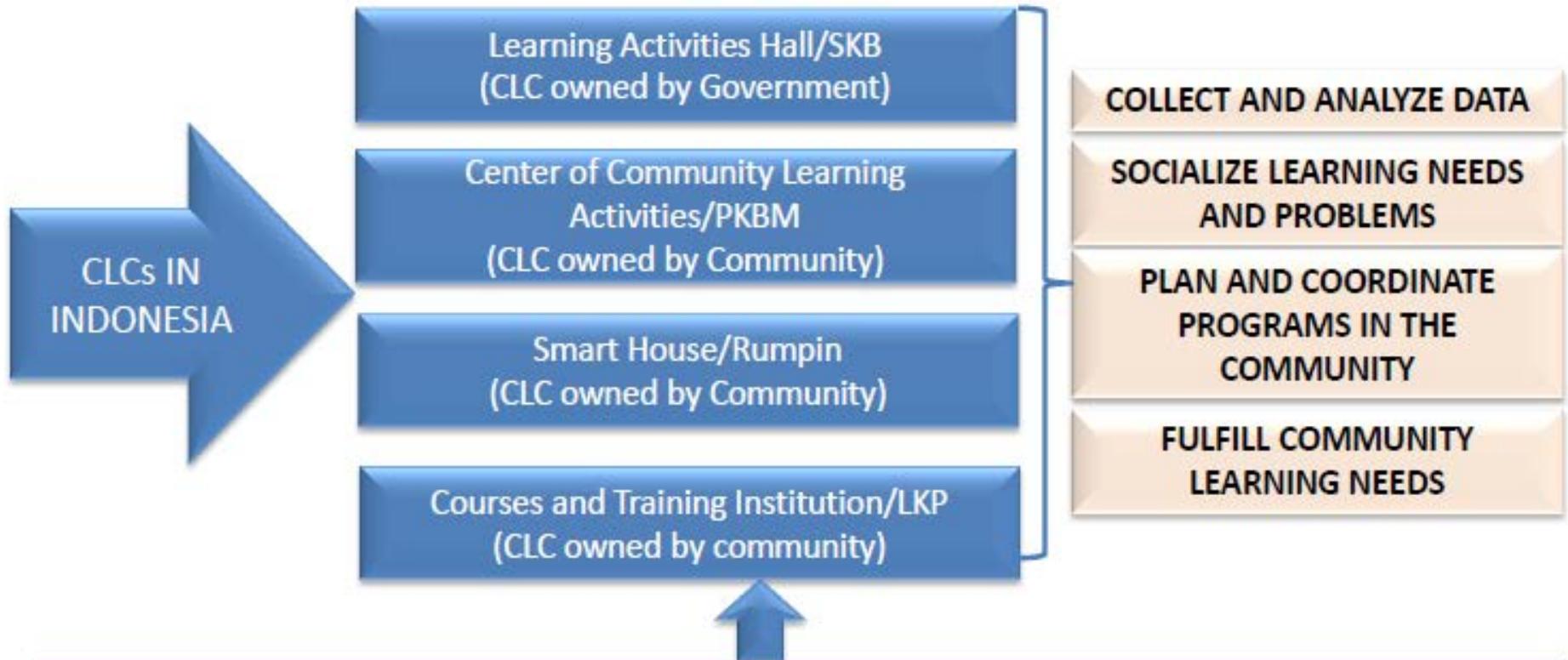
Giving added value to local product – casava home industry

# EfSD programs in nonformal & informal education

- Imbedding life skills into literacy programs
- Efsd in daycare and play group
- Imbedding ESD in life skills trainings
- Entrepreneurship program
- Environment awareness campaign
- Women empowerment programs



# Non Formal Education Institutions



## Some programs implemented at CLCs:

1. Early Childhood Education,
2. Illiteracy Eradication,
3. Package A-equivalent to Primary School,
4. Package B-equivalent to Junior Secondary School,
5. Package C-equivalent to Senior Secondary School,
6. Working Skills,
7. Entrepreneurship,
8. Arts and Culture,
9. Community Reading Center, etc.

# Non-formal Education Institutions

- Number of community learning centers (PKBM): 9,944 institutions
- Number of community reading centers (TBM): 7.082 centers
- Number of competency & certification institutions (LSK): 30 institutions.
- Skill training institutions: 22,075 institution
- Number of competency assessment centers (TUK): 825 centers

COMMUNITY CENTER  
IN KAMPUNG





**RECYCLE WASTE WATER FOR PLANTS IN  
THE WHOLE KAMPUNG**



# RECYCLE DOMESTIC WASTE



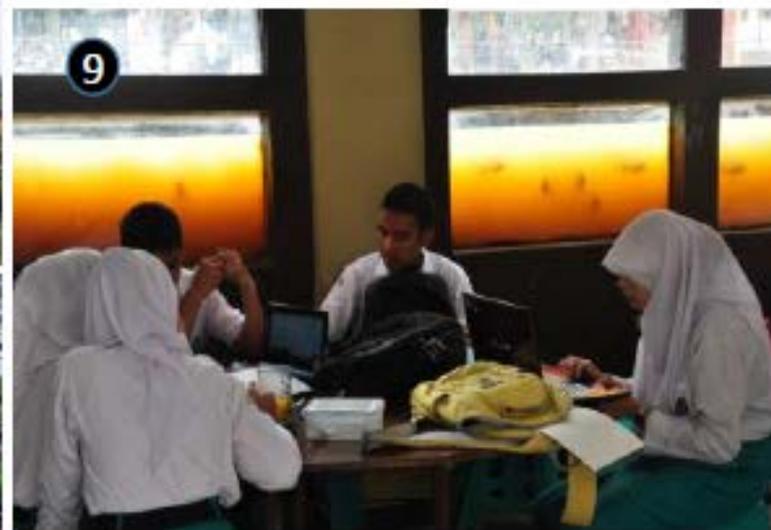
# HOME INDUSTRY IN KAMPUNG



# LAND OPTIMIZATION IN GREENING



Innovation  
**The Use of Water from the  
River**



# Innovation Energy Saving



# Innovation Biodiversity



# Innovation Climate Change Education.

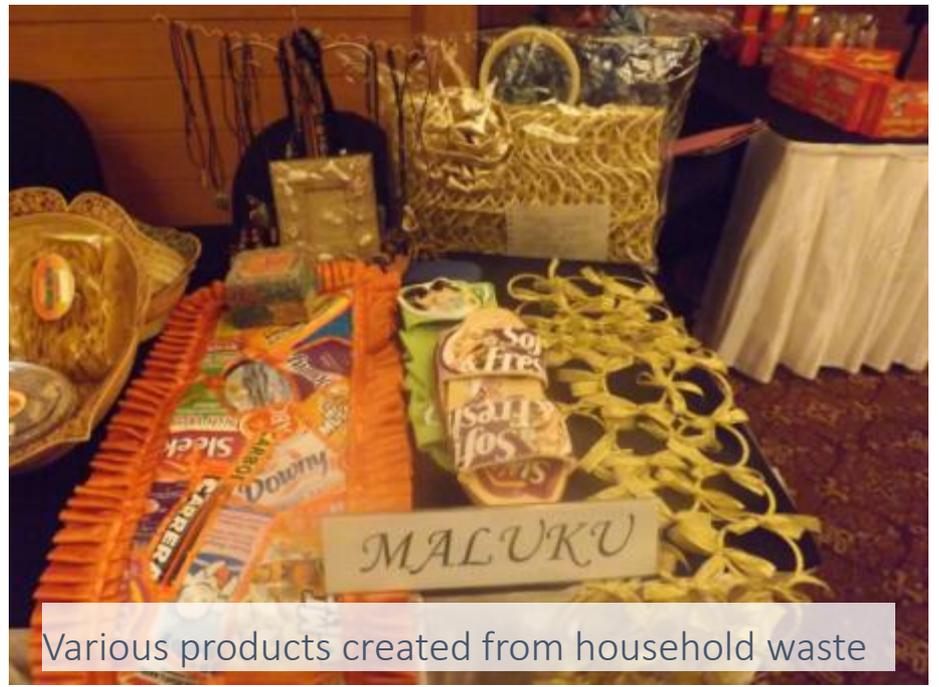


# Innovation Waste Recycling and Green Economy





Recycled Newspaper



Various products created from household waste



Bamboo Craft



Clothes Sewing



Processed Foods of Flour



# Sahabat Pulau Activities January 2013 – September 2014

**Project Site  
Lampung  
P. Pahawang**





# Sahabat Pulau Activities

## Site Project initiation In Takabonerate Archipelago , Indonesia





# Sahabat Pulau Activities

## Ramadhan activities with children in House of Hope Garut, Juni 2014



# CHALLENGE AND EXPECTATION

## CHALLENGE

- Most people in *kampungs* and villages are not aware about the environment because most of them are poor
- Very difficult to have Agents or Cadres of change because it is a volunteer works
- Most of urban development do not provide justice and equitable opportunity for all people to develop themselves according to the potential
- Only few local government gives supports in policies
- Not all communities understand what is sustainable village or *kampungs* (clean, safe, healthy, harmony and with a good income)

# CHALLENGE AND EXPECTATION

## EXPECTATION

- All *kampungs* and villages in Indonesia have Agents of change or Cadres who can communicate, encourage, innovate, initiate, and support the community to solve their problem, to upgrade the *kampungs/villages*, and to create better life.
- Environmental quality is not only implemented in the physical development aspects but also in the development of a sound environmental consciousness
- Urban development provides justice and equitable opportunity for all people to themselves according to their potential
- The local government always gives supports especially in policies
- All communities live in sustainable village, *kampungs* or cities live in healthy and clean condition, live in harmony, aware about the environment, and increase the living income.

# Challenges of Disaster Risk Reduction

- There are more than 258,000 schools in Indonesia, it is estimated **25% schools are located in disaster prone areas**. These schools are also at **risks from small and medium scale disasters**.
- Most government primary schools were built in the 1980s, where **DRR aspect was not considered**.
- Policies are in place at the national level. Strong buy-in from NDMA and MoEC however **coordination between the two agencies remains ad-hoc**.
- A large number of CSOs working on Safe Schools programming (50+ agencies), notably there are **three CSO networks have relevance on Safe Schools programming (National Secretariat on Safe Schools, Consortium for Disaster Education, and Education Cluster)**.
- More than **1,800 pilot schools** but replication and scaling up are still a major challenge.









# Ways forward

- Institutionalizing and **strengthening inter-agency coordination** between NDMA, MoEC, MoRA, MoHA, and other relevant government agencies.
- Providing clear direction and planning through development of **national strategy on Safe Schools**
- **Improve monitoring** through integration of Safe Schools data with Education Management and Information System (MIS)
- **Disseminate current regulation, guidelines and build capacity to local governments** at sub-national level
- Explore collaboration with other actors including **private sectors and charity groups**

# PARTNERSHIP AND COLLABORATION



*... And many other agencies (local, national, and international)*

