



# A SINGLE DROP FOR SAFE WATER

“Communities United Through Water”



# Mission

ASDSW is a non-profit organization building the capacity of self-reliant partnerships to plan, implement and manage community-driven clean water and sanitation solutions through sustainable organizational strategies, WASH Education and appropriate technologies.

# WASH

WASH = **W**ater **S**anitation and **H**ygiene promotion



# Sustainability from the Start

Community ownership of the **process** will lead to ownership of the project.

ASDSW works with communities and their local government partners to inventory their **situation** and **resources**, then create a WASH plan for **long term improvement**



This plan results in numerous strategies and these become projects based on needs and resources.



Household interviews  
Kabuntalan, Maguindanao



Community  
Mapping  
Kabuntalan  
Maguindanao

WASH Planning  
training for Sulu  
Municipalities in  
Zamboanga City



This process is facilitated by a community group from a General Assembly. During the process, knowledge on WASH, Technologies and how it affects us is transferred to the local group and then to the local community.

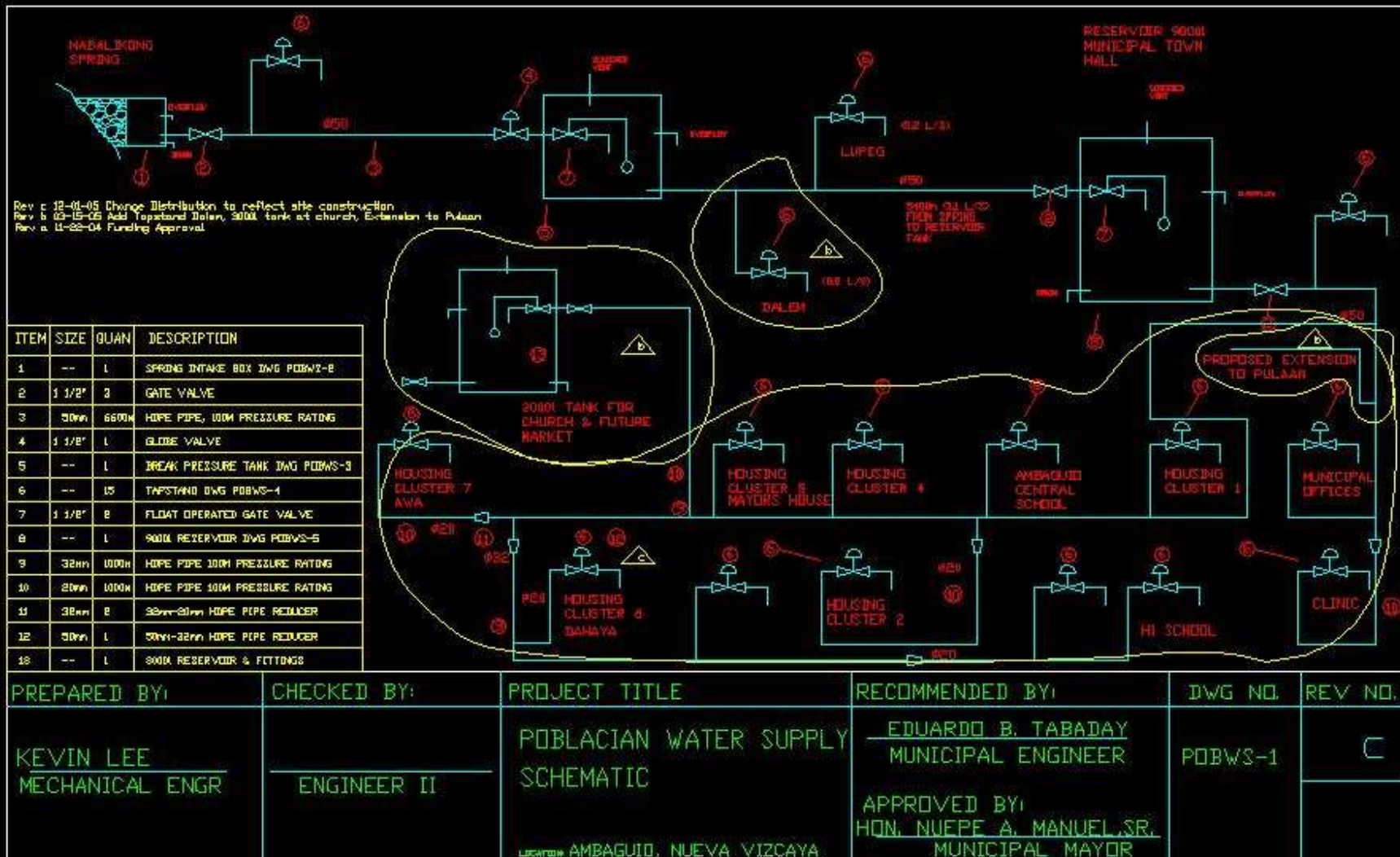


Water test  
Results  
Maguindanao  
←  
Water Testing  
Sulu →

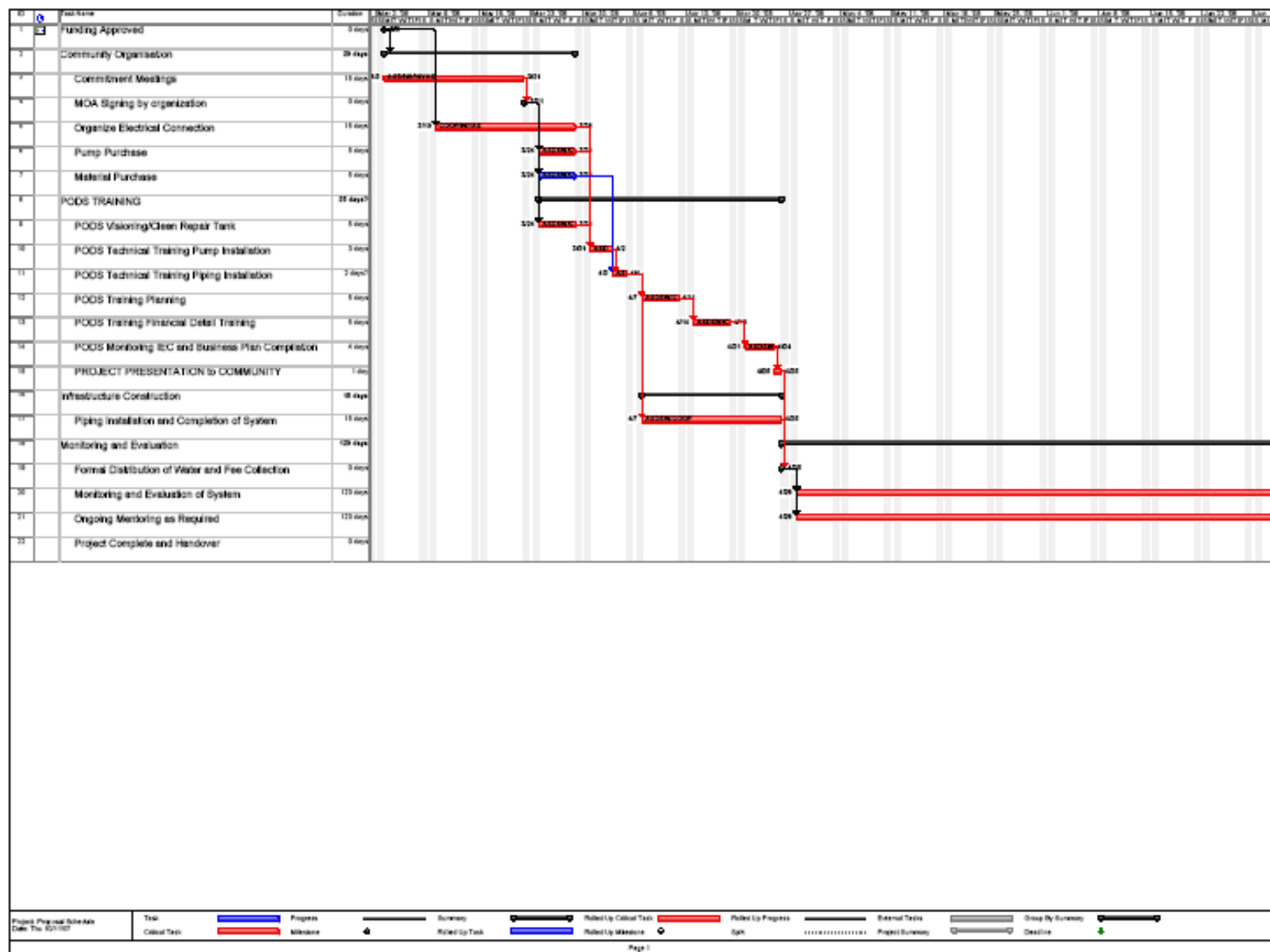


# Project Design

As a continuation of the community ownership theme the strategies of the plan are developed into projects. This results in a project plan and proposal.







Acc No.	Description	Cost Estimate Section				Committed	Estimated	Estimated	Difference	Comments
		Quantity	Unit	Unit Price	Total	Cost	Left	total	From Budget	
<b>1000</b>	<b>Intake Box Materials</b>				<b>20547</b>			<b>19789</b>	<b>-878</b>	<b>Original est 18525 (inflation)</b>
1001	Cement	40kg 12 sack		149	1788	2640	0	2640	852	canvass solano 2004
1002	Sand	40 cans		41	1640	1200	400	1600	-40	Original estimate
1003	Gravel	80 cans		41	3280	3000	0	3000	-280	Original estimate
1004	Boulder	3 cubc m		800	2400	0	2400	2400	0	Original estimate
1005	sahara	12 bag		22	264	600	0	600	336	canvass solano 2004
1006	Re-Bar-10mm	15 pcs		96	1440		1500	1500	-60	canvass solano 2004
1007	Tie Wire #16	2 kg		43	86	100	0	100	14	canvass solano 2004
1008	Lumber 1"x12"x10' (10 pcs)	100 bd ft		35	3500	1500	1500	3000	-500	canvass solano 2004
1009	Lumber 1"x12"x12' (10 pcs)	120 bd ft		35	4200	1000	2000	3000	-1200	canvass solano 2004
1010	Lumber 2"x2"x12' (15 pcs)	60 bd ft		25	1500		1500	1500	0	canvass solano 2004
1011	Nails etc. (4", 2 1/2")	3 kg		40	120		120	120	0	canvass solano 2004
1012	1 1/2" x 200mm Gi Nipple	3 pcs		90	270		270	270	0	canvass solano 2004
1013	1 1/2" Elbow	1 pcs		40	40		40	40	0	canvass solano 2004
1014	1 1/2" Plug	1 pcs		19	19		19	19	0	canvass solano 2004

# Project Implementation

There are two components to this:

- 1.** Based on the initial group and the results of the planning/project design process; form or strengthen organization to implement, operate, maintain and administrate system. This program is called People Offering Deliverable Services (PODS)

**2. Infrastructure Installation.** This is done by the community. They are trained to build install and maintain the infrastructure as it is built. This can range from level III (house to house distribution) to improving dug wells. The infrastructure implemented is based on the needs and resources



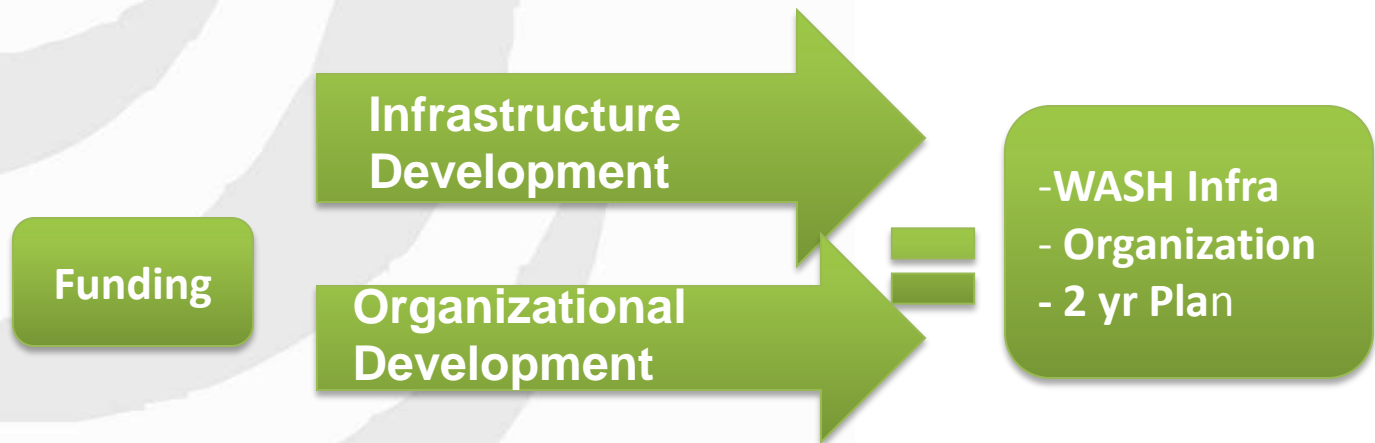
- ***People Offering Deliverable Services*** — is ASDSW's program that seek to transform supply driven development approach to demand driven.

- ***From***



- ***to***

**Community Led  
WASH  
PLANNING and  
PROJECT  
DEVELOPMENT**



# Technologies

- **Water Supply**
  - Community Distribution Systems
    - Spring Development
    - Deep Well electric pump
  - Water Source
    - Dug Well Improvement
    - Shallow and Deep Well Hand Pumps
    - Rain Water Harvesting
- **Water Treatment**
  - Bio-Sand Filter
  - Chlorination
  - Sedimentation/Chlorination plant
- **Sanitation**
  - Ventilated Improved Privy
  - Water Seal Latrine
  - Septic Tanks and Leach Fields
  - De-sludging (Mechanical and Biological)
- **Drainage**
  - Soak Pits
- **Water Quality Monitoring**
  - Portable Microbiology Laboratory (Biological contamination)

# PODS Training





PODS Training for  
Bakungan Coastal  
Development Residents  
Association inc. Puerto  
Princesa City, June 2009  
for Bio-Sand Filter  
Production





# Bio-Sand Filters



Bio-sand Filter  
San Mateo, Rizal  
January 2009



Bio-sand Filter  
Caloocan January 2009



Bio-Sand Filter  
Traning Datu  
Abdul Sangki,  
Maguindanao  
August 2007







PODS with BSF and Water  
Quality Monitoring , Batarazza  
Palawan 2009 (Indigenous  
Peoples)



# Rain-Water Harvesting



Bountiful Harvest, Puerto  
Princesa City March 2009

Ganassi, Lanao Del Sur  
Feb 2009 (Water and  
Sanitation Association/LGU









# Household Sanitation



Sanitation workshop in Sultan Kudurat, Maguindanao.  
February 2009 for MWTF's, WSA's in Maguindanao,  
Lanao Del Sur and Sulu. Pictured are Water Seal in dome  
Slab and Ventilated Improve Privy slab





Toilet Bowl  
Manufacturing



Water Seal  
Toilet flood  
Prone area  
←  
VIP for  
Waterless  
Area →





# Wells and Pumps



Improved Dug Well and Pump installation and repair Training  
Kabuntalan, Maguindanao Feb 2009



Hand  
Pump  
Repair  
←  
Dug  
Well  
Improvement  
→



Jet Pump  
Installation  
←  
Operating  
Jet Pump  
Level II  
Water System  
Iba, Zambales  
2008  
→





# Level II and III Spring Dev



Barangay Iraya, Buhi, Camarines  
Sur Level III spring development  
Gravity fed, 47 tapstands, 2700 People  
Cons Nov 08 to March 09









Barangay Siasio East and West, Sual  
Pangaisinan Level III spring  
development Gravity fed, 40  
1900 People  
Cons Nov 08 to April 09













# Level II and III Pump Systems



300' Deep  
Well and Pump  
Guimba, Nueva  
Ecija 2010







PODS Training for Water  
System. Includes Water  
Quality Monitoring.

Guimba Nueva Ecija,  
2010

# Engineering and Innovation



Engineering  
Training  
Cotabato City  
Feb 2009



Emergency Water Treatment  
Station, 50,000 liters per day  
Datu Piang, Maguindanao  
May 2009







# Humanitarian Response



Mindanao Armed  
Conflict 2009/10



Luzon Typhoon Sep  
2009 and Oct 2010



Luzon Volcano  
2009







Introduced low cost simple  
Water testing for biological  
Contamination in  
Humanitarian  
Response situation .





## Technical Advice, Construction Supervision And Capacity Development.











## Rapid Assessment and Action Planning.







# Humanitarian Response Consortium

A Single Drop for Safe Water, Inc.

Balay Rehabilitation Center

Kadtuntaya Foundation, Inc.

People's Disaster Risk Reduction Network

Oxfam

Rural Development Institute of Sultan Kudarat

# The Humanitarian Response Consortium

The HRC will strive to provide the highest quality humanitarian services to affected populations with the humanitarian response being:

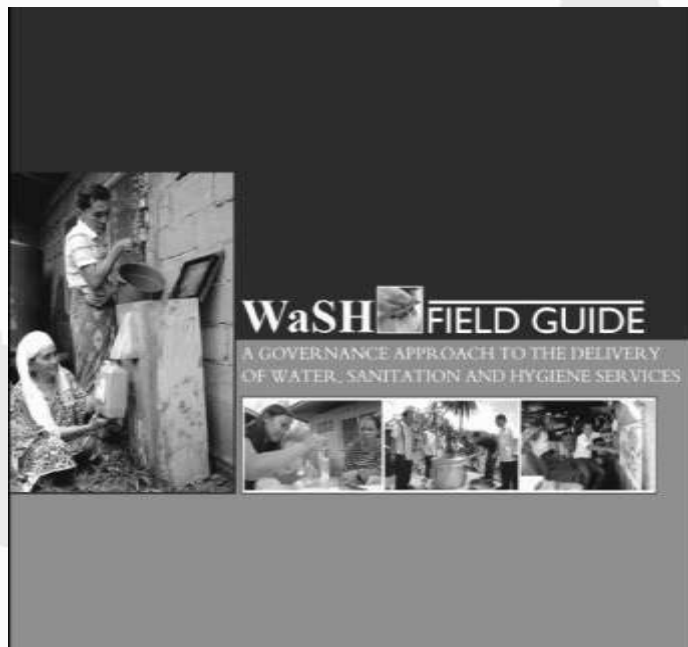
- **Rapid and timely**, with the HRC reducing time in mobilization and decision-making by pre-establishing a mode of implementation.
- **Appropriate** in terms of localizing international standards and accounting for cultural and environmental conditions.
- **Efficient** in providing quality assistance at reasonable costs and minimizing wastage.
- **Responsible** in reducing the long-term effects of response on local development efforts, ensuring that resilience is built and is protective of the environment.
- **Maximizing participation** of IDPs and affected populations, especially of women, in the humanitarian effort.
- **Coordinating with all actors**, such as government and non-government actors, as well as the affected communities, and taking on humanitarian advocacy as part of the humanitarian response.

# The Humanitarian Response Consortium

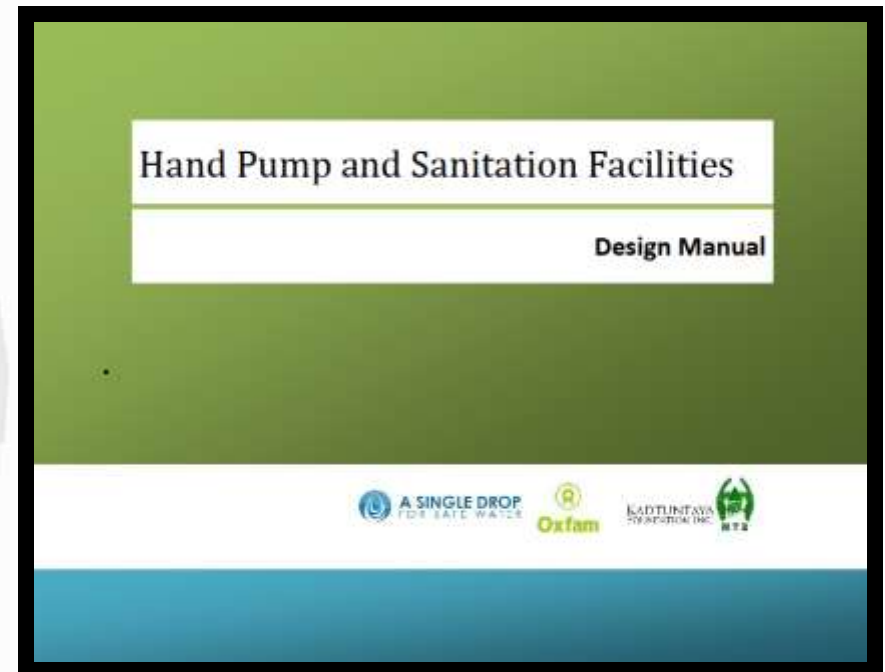
- Composed of local NGOs with different specific skills and situated in geographical locations so as to provide comprehensive services to affected populations throughout the country.
  - ASD – based in Cotabato City, Puerto Princesa – WASH
  - Balay – based in Manila, North Cotabato – Psychosocial support
  - RDISK – based in General Santos – EFSL
  - KFI – based in Cotabato City – WASH
  - PDRRN – based in Pampanga – DRR
  - Oxfam – based in Manila



# Knowledge Product



[http://www.lgspa.org.ph/kp/c\\_b.php?KnowledgeProductID=56](http://www.lgspa.org.ph/kp/c_b.php?KnowledgeProductID=56)





## Research Project

The Impact of Water PODS to Increase Resilience and Self-Reliance of Vulnerable Populations Through Community-Led Provision of Water, Sanitation and Hygiene (WASH) Services and Appropriate Technologies

# *Final Report*

*Submitted to:*

**Science and Technology Innovations  
for the Base of the Pyramid in Southeast Asia (iBoP Asia)**

*By:*

**A Single Drop for Safe Water (ASDSW)**

*and*

**University of the Philippines – Institute for Small-Scale Industries (UP ISSI)**

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