

17TH SUSTAINABLE SHARED GROWTH SEMINAR

February 11, 2014 (Tuesday)

COLLEGE OF ENGINEERING , UNIVERSITY OF THE PHILIPPINES

DEVELOPING COMPETITIVE FILIPINO INVENTORS *BRIDGING GAP BETWEEN INNOVENTIONS AND MARKET*



BY DEAN ANTONIO F. MATEO, Ph.D.

**WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO) 1994 BEST INVENTOR
ADVISER - LIFE MEMBER , FILIPINO INVENTOR SOCIETY INC.
GRADUATE SCHOOL PROFESSOR – DOCTOR OF ENGINEERING**

INVENTION AND INVENTOR AS DEFINED BY R.A. 7459

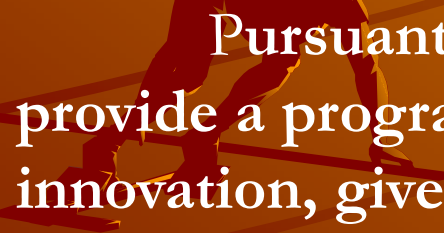
(a) Invention refers to, any patented machine, product, process including implements or tools and other related gadgets of invention, utility model and industrial design patents.

(b) Inventor refers to the patentee/s, heir/s, assignment/s, of an Invention letters patent, Utility Model letters or Industrial Design letters patent.

DECLARATION OF NATIONAL POLICY

Art.1 , Sec. 2 of R.A. 7459 : INVENTORS INCENTIVES ACT

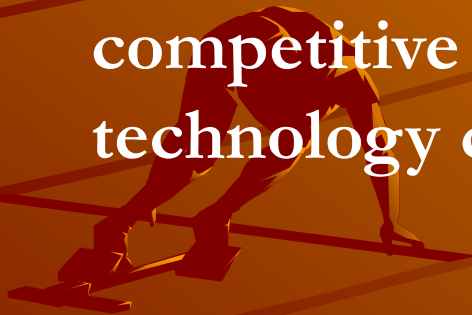
It is hereby declared to be the national policy to give priority to invention and its utilization on the country's productive systems and national life; and to this end provide incentives to inventors and protect their exclusive right to their invention, particularly when the invention is beneficial to the people and contributes to national development and progress.



Pursuant to the national policy, the Government shall provide a program to set up a climate conducive to invention and innovation, give encouragement and support to inventors who are creative and resourceful, as well as imbued with a deep sense of nationalism, and maximize the capability and productivity and inventors through incentives and other forms of assistance and support.

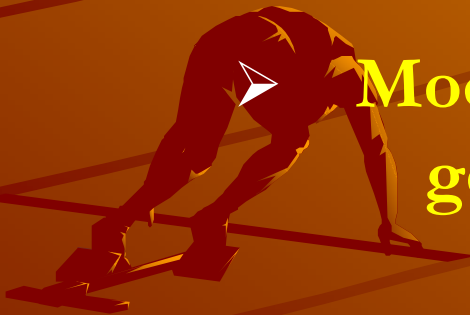
PHL VISION FOR S&T NATIONAL SCIENCE & TECHNOLOGY PLAN

By 2020, the Philippines shall have developed and produced a wide range of globally competitive products and services with high technology content.



By 2020

- A well-developed S&T based SME sector;
- World-class universities in S&T;
- Internationally recognized scientists and engineers; and
- Model status in S&T management and governance.



A. GLOBAL SCENARIO - GENERAL

- Borderless Exchange
- Heightened Competition
- Greater Cooperation
- Widening Income Gaps
- Growing Communications Network
- Increased Pressure from Technological Change
- Rising Rate of Industrialization
- Rising Demand for Services
- Rising Wages
- Mobility of Manpower



B. GLOBAL SCENARIO – S&T

- Rapid technological change
- More IPR consciousness and enforcement
- More international collaboration in S&T/R&D activities
- More SMEs as technology spin-off enterprises
- Role of venture capital in technology commercialization has become more pronounced



PRESENT SITUATION

NO SIGNIFICANT PROGRAMS FOR INVENTORS & INVENTION DEVELOPMENT . THE INVENTORS BUILDING STILL A SKELETON STRUCTURE

INVENTION PATENT APPLICATIONS WITH IPOPHL STILL LESS THAN 3.0 % LOCAL AND 97 % FOREIGN FOR THE LAST 20 YEARS

NATIONAL R&D EXPENDITURES IS STILL AT 0.12 % OF GDP . TARGET IN 2010 IS 1.0%

VENTURE CAPITAL STILL NOT AVAILABLE

COMPARISON OF R & D PERSONNEL

(per million of population)

COUNTRY	R & D Personnel
JAPAN	3,961
SINGAPORE	3,451
INDONESIA	1,268
KOREA	1,150
PHILIPPINES	155
UNESCO	380

SOURCE : TECH. PAPER OF DR. RICARDO PALMA, PRESIDENT OF BCF UNIVERSITY ,
NATIONAL SEMINAR-WORKSHOP ON ENGINEERING EDUCATION, JAN. 2004

INVENTION PATENTS GRANTED IPOP HL : 2005 – 2012 PERIOD

YEAR	BY RESIDENTS	BY NON-RESIDENTS	PERCENTAGE RES. / NON-RES
2005	4	1,638	0.24 / 99.76
2006	5	1,191	0.42 / 99.58
2007	2	1,785	0.11 / 99.89
2008	41	797	4.89 / 95.11
2009	22	1,657	1.31 / 98.69
2010	13	1,140	1.13 / 98.87
2011	6	1,129	0.53 / 99.47
2012	5	1,110	0.45 / 99.55
AVERAGE	12	1,306	0.91 / 99.09

SOURCE: 2013 Intellectual Property Office of the Philippines

FILIPINO INVENTORS PROBLEMS

WORSEN DUE TO THE ABOLITION OF THE PHILIPPINE INVENTIONS DEVELOPMENT INSTITUTE (PIDI) WHICH WAS REPLACED BY THE TECHNOLOGY APPLICATION AND PROMOTION INSTITUTE (TAPI)

* TAPI CONCENTRATION OF PROGRAMS DIRECTED TO TECHNOLOGY PROMOTION AND NOT IDEA GENERATION AND DEVELOPMENT

* THE TRANSFER OF FUNCTIONS OF PIDI TO TAPI NOT PROVIDED FOR UNDER EXECUTIVE ORDER # 128

INVENTORS BASIC PROBLEMS

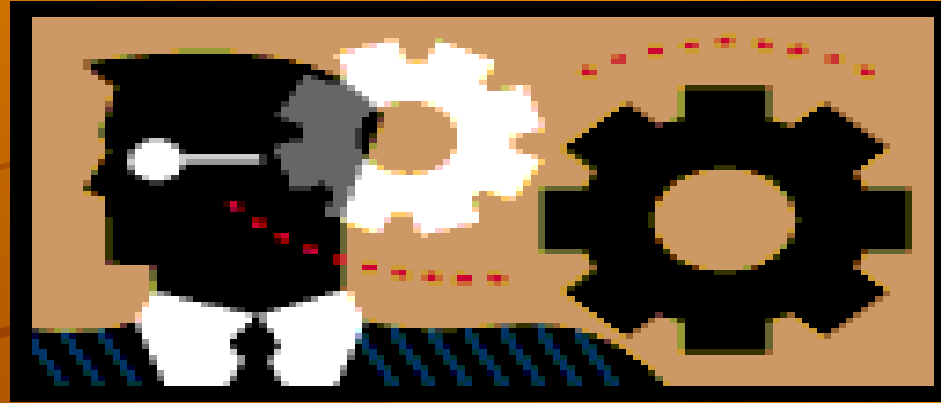
- * FUNDING - R & D , PROTOTYPE DEVELOPMENT, PRODUCTION , PROMOTION AND COMMERCIALIZATION
- * INSUFFICIENT GOVERNMENT ASSISTANCE ON TECHNICAL AND LEGAL MATTERS
- * LACK OF GOVERNMENT ASSISTANCE IN COUNSELLING, LICENSING AND TECHNOLOGY TRANSFER NEGOTIATIONS
- * LACK OF ASSISTANCE IN PRODUCT PROMOTION & MARKETING
- * THE ABSENCE OF PROGRAMS FOR INVENTORS AND INVENTIONS / CREATIVITY CONTINUING DEVELOPEMNT



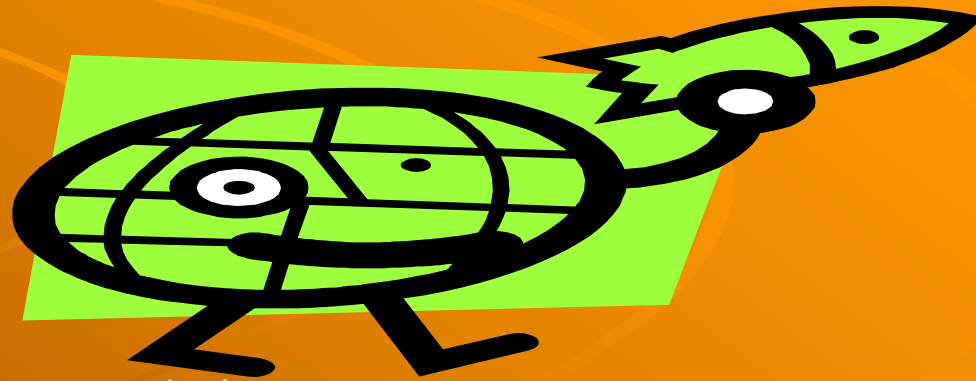
HISTORICAL LESSON

AROUND THE YEAR 1900, A JAPANESE COMMISSIONER IN WASHINGTON, DC WHO WAS THERE TO STUDY THE AMERICAN PATENT SYSTEM STATED “ WE HAVE LOOKED ABOUT US TO SEE WHAT NATIONS ARE THE GREATEST, SO THAT WE CAN BE LIKE THEM WE SAID, “WHAT MAKES THE UNITED STATES SUCH A GREAT NATION? “ AND WE INVESTIGATED AND FOUND THAT IT WAS PATENTS, AND WE WILL HAVE PATENTS

AS INVENTOR - ENTREPRENEUR TO BE COMPETITIVE AND SUCCESSFUL



- **MUST FORMULATE AND IMPLEMENT SOME ENTREPRENEURIAL STRATEGIES and**
- **BRIDGE GAP BETWEEN INNOVENTIONS AND MARKET**



*CONSIDER THE DEMANDS OF THE
NEW GLOBAL ECONOMY*

** CUSTOMER FOCUS*

** CONTINUOUS QUALITY IMPROVEMENT*

** ENVIRONMENTAL SENSITIVITY*

CONSIDER THE DRIVERS OF AREA COMPETITIVENESS

- QUALITY OF LIFE
- COST COMPETITIVENESS
- DYNAMISM OF LOCAL ECONOMY
- INFRASTRUCTURE
- LINKAGES AND ACCESSIBILITY
- HUMAN RESOURCES & TRAINING



NOTE: Decision to set-up business needs answers to the above factors .

ENTREPRENEURIAL LOGIC

"INFLUENCING THE MARKET"

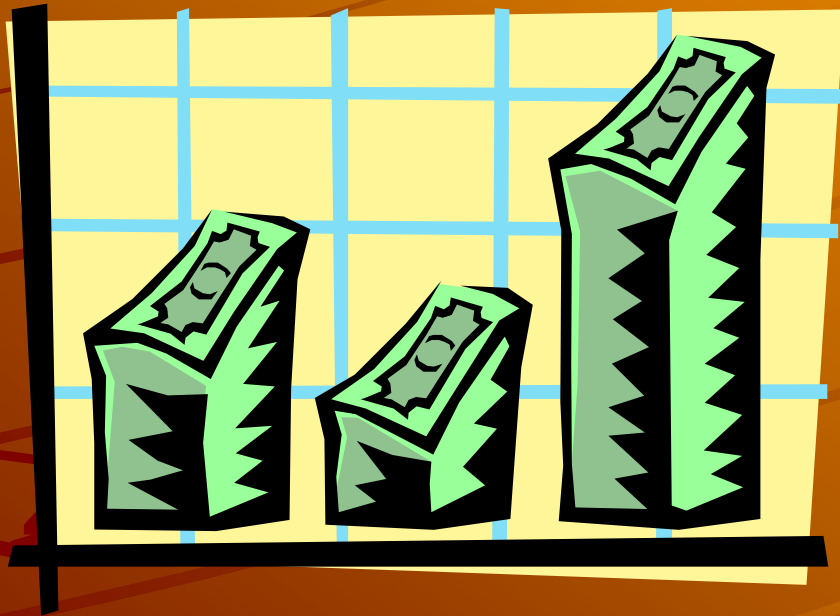
REMIND

PERSUADE

INFORM



GENERAL RULES IN INNOVENTING ACTIVITIES



Remember . . . these general rules . . .

There is always a technical solution to any technical problem.

The chance of success is high if you can develop the invention yourself.

You should possess some technical knowledge and experience in the field of your invention.

Persistently work until you finish developing your ideas into useful inventions....apply for a patent.... and be one of the .002 % Filipinos Registered with our Philippine Patents Office.

*AS INVENTOR , ACCUMULATING 81 PATENTS
IN 40 YEARS OF INNOVENTING ACTIVITIES ,
PRODUCTION, MANUFACTURING AND
COMMERCIALIZATION HAS NOT REACHED
20 %*

SAMPLE INVENTIONS & UTILITY MODELS DEVELOPED BY OBSERVATIONS AND IDENTIFYING THE PROBLEMS

1.0 MULTI PURPOSED HANDICAPPED WHEEL CHAIR

2.0 THE TWISTER

3.0 HANDICAPPED TWISTER & CYCLE EXERCISER



MULTI PURPOSED HANDICAPPED WHEEL CHAIR



- ❖ **Uniquely designed for handicapped person;**
- ❖ **Incorporates facilities such as shower, water closet, food table and head rest;**
- ❖ **Has wheels to move patient comfortable to any locations.**

TWISTER

“THE WAIST TRIMMER”



Stationary Exerciser for Waist Trimming and Abdominal Muscle Development. Stable platform

HANDICAPPED TWISTER & CYCLE EXERCISER

“The EXERCISER particularly developed for physically impaired and for senior citizens”



Multi-functional Exerciser for Handicapped Patients and Senior Citizens Physical Rehabilitation.

SAMPLE INVENTIONS & UTILITY MODELS DEVELOPED BY LISTENING TO CLIENTS AND USING COMMONSENSE

1.0 WATER METER PROTECTOR

2.0 MAGNETIC SHIELD BOX

3.0 TAMPER PROOF WATER METER STAND

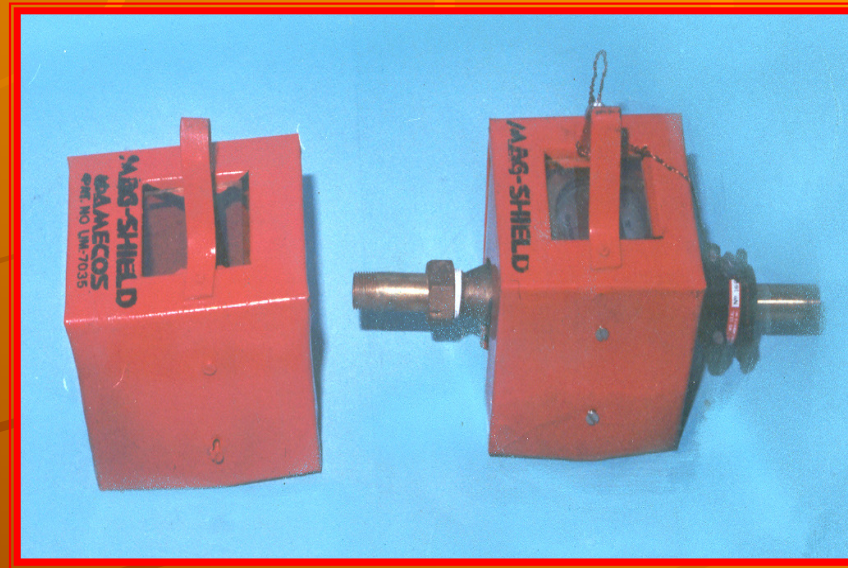


WATER METER PROTECTOR



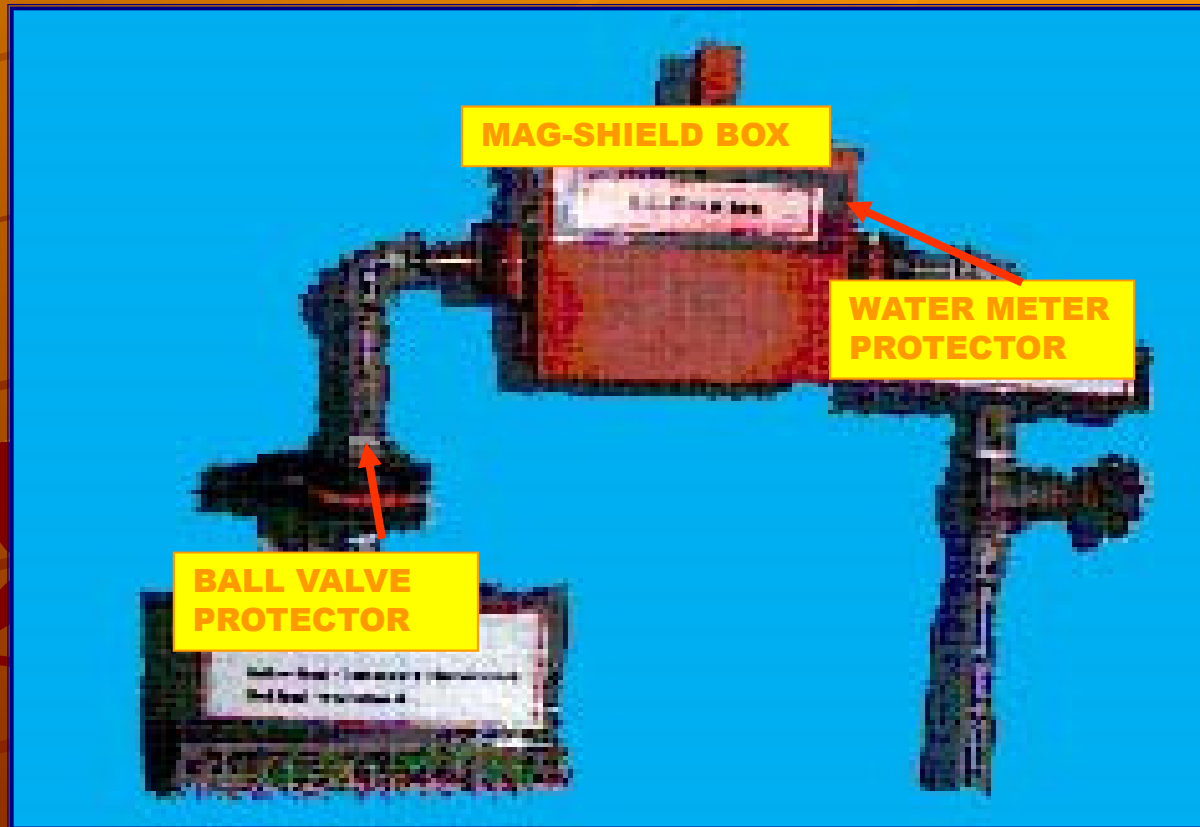
- ❖ An effective guard/seal for service entrance fittings;
- ❖ Protects Water Meters against theft and tampering;
- ❖ Has three built-in-seals that completely secure the tail piece nuts of water meters;
- ❖ Has color coded plastic seal for effective management control and identification of delinquent concessionaires;
- ❖ Reusable, however, bolts can be secured with epoxy for permanent sealing;
- ❖ Can function as a convenient shut-off device.

MAGNETIC SHIELD BOX



- ❖ Protects all magnetically coupled Water Meters against tampering with the use of magnets;
- ❖ Protects Water Meters against vandals;
- ❖ Totally secure Water Meters Calibrating screws against unauthorized adjustments.

TAMPER PROOF WATER METER STAND

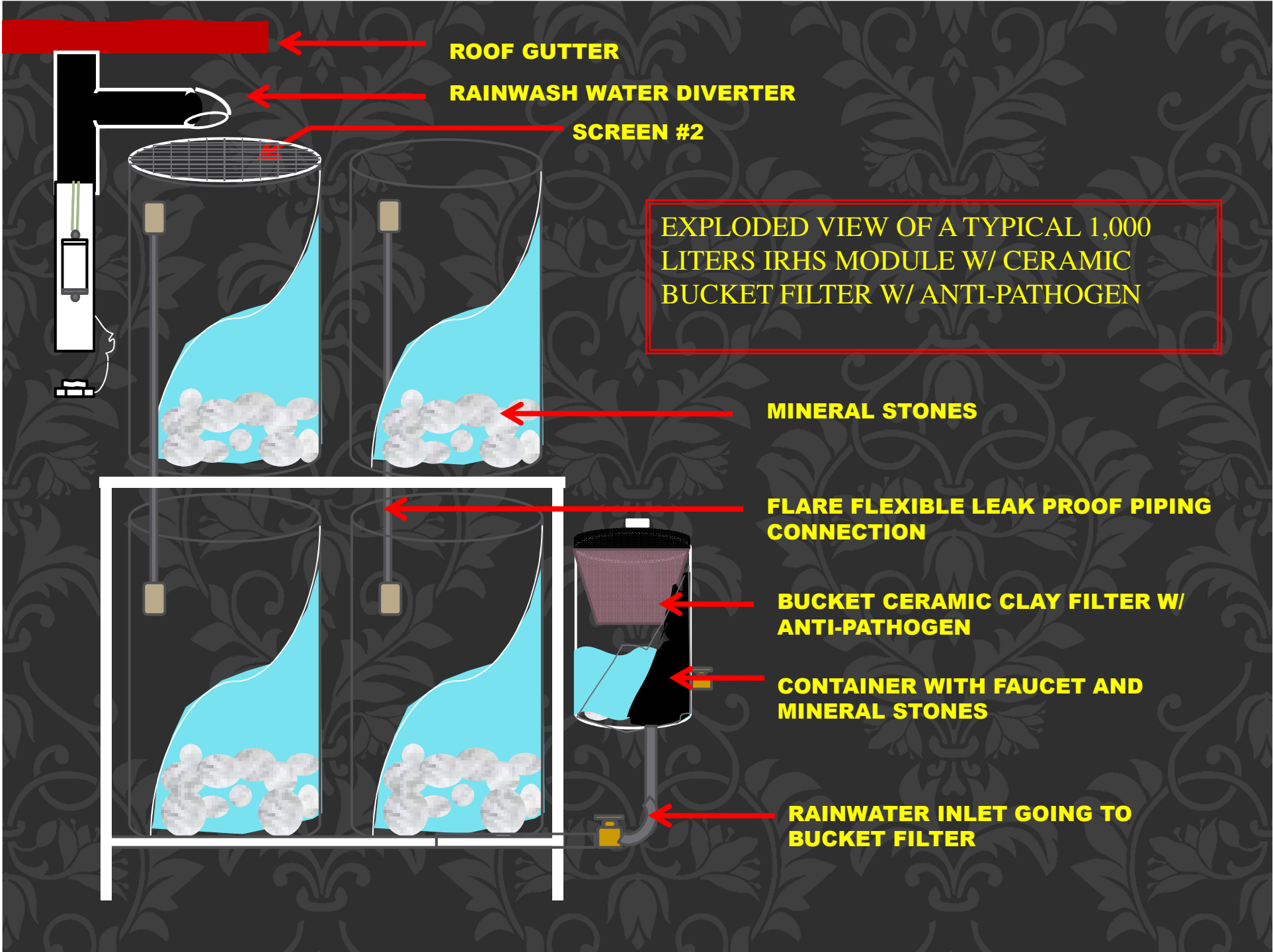


DIPLOME & BRONZE MEDAL WINNER
27TH International Inventions Exhibition Geneva, Switzerland '99

SAMPLE INVENTION & TECHNOLOGY DEVELOPED FOR THE ENVIRONMENT

INNOVATIVE RAINWATER HARVESTING SYSTEM, SILOS AND RELATED TECHNOLOGIES

**“CREATIVE ENGINEERING INTERVENTIONS FOR CLIMATE CHANGE,
WATER CRISIS, FLOODINGS AND DISASTERS”**



PORTABLE EMERGENCY WATER FILTER ASSEMBLY



REGULAR ASSEMBLY



ASSEMBLY WITH BISCUITS & CANDIES

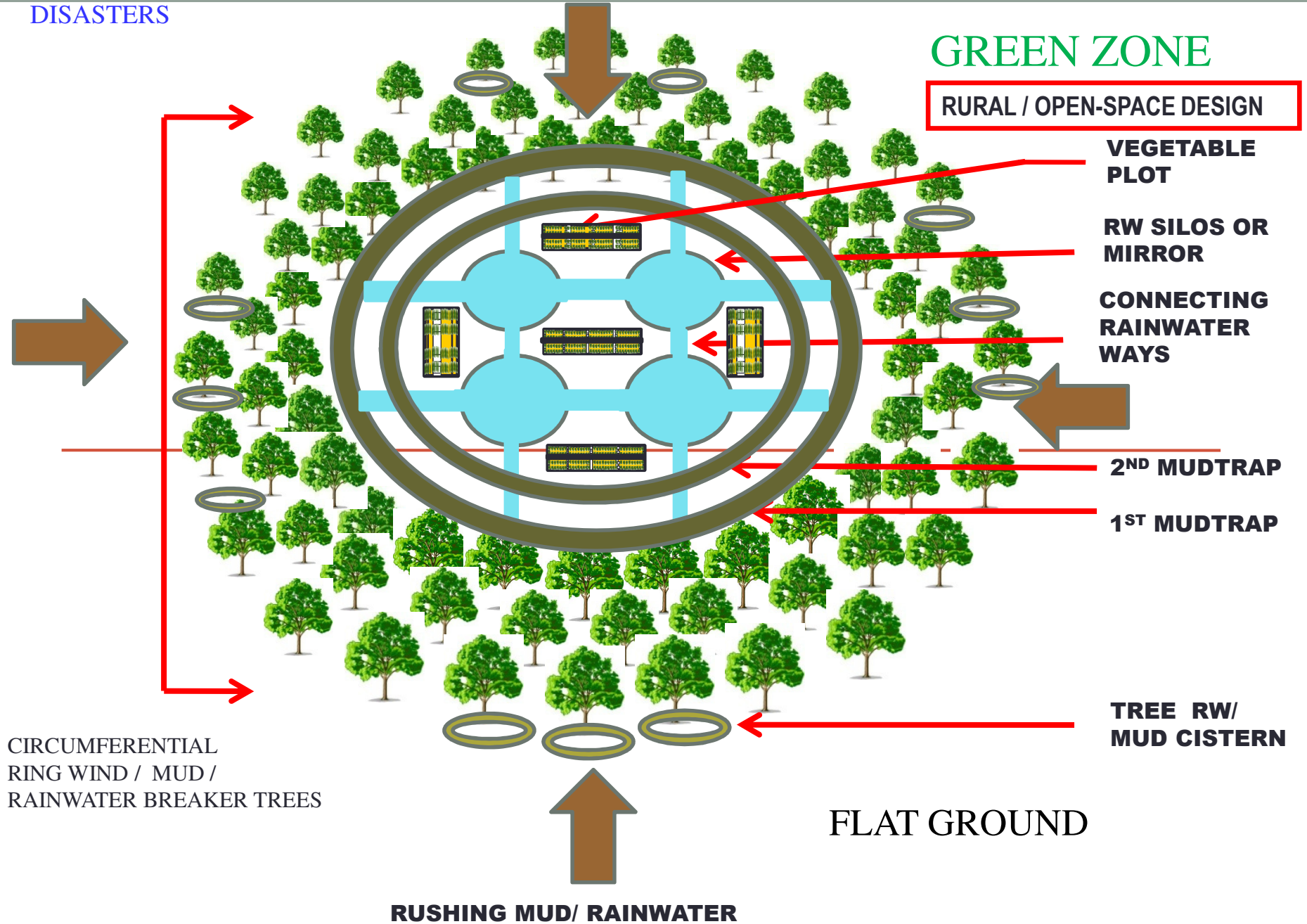
THE INNOVATIVE RAINWATER HARVESTING SILOS

*“ENGINEERING INTERVENTIONS AGAINST
TYPHOONS, FLASHFLOODS, & OTHER DISASTERS”*

MULTI-USES

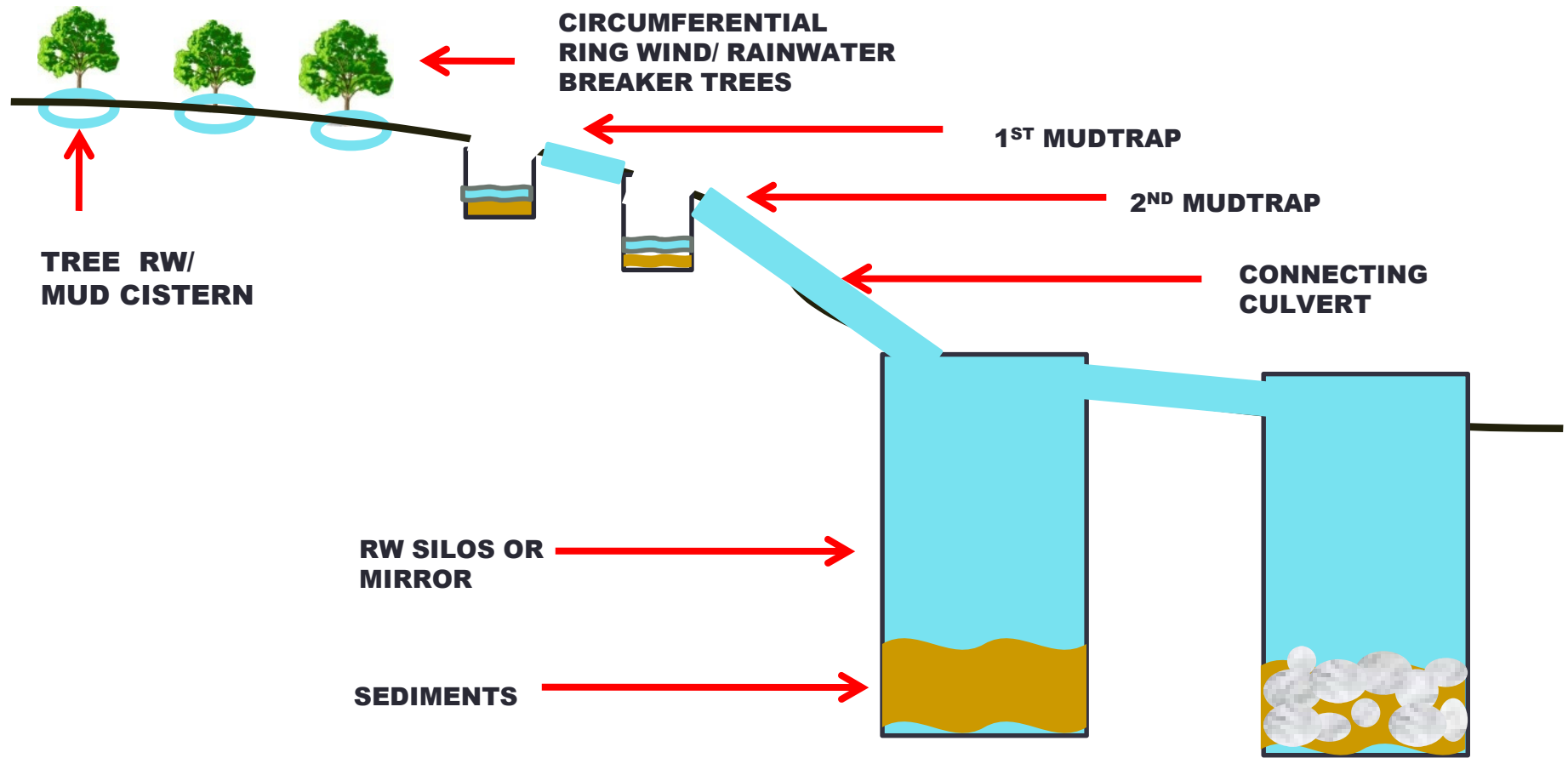
* FISH POND SILO * DUCK POND SILO * *
IRRIGATION SILO * POTABLE WATER * *MUD TRAP
SILO * FLASH FLOOD SILO * WATER SURGE SILO *
CADAVER SILO * OTHERS *

ENGINEERING INTERVENTION TO CUSHION EFFECTS OF CLIMATE CHANGE, WATER CRISIS & DISASTERS



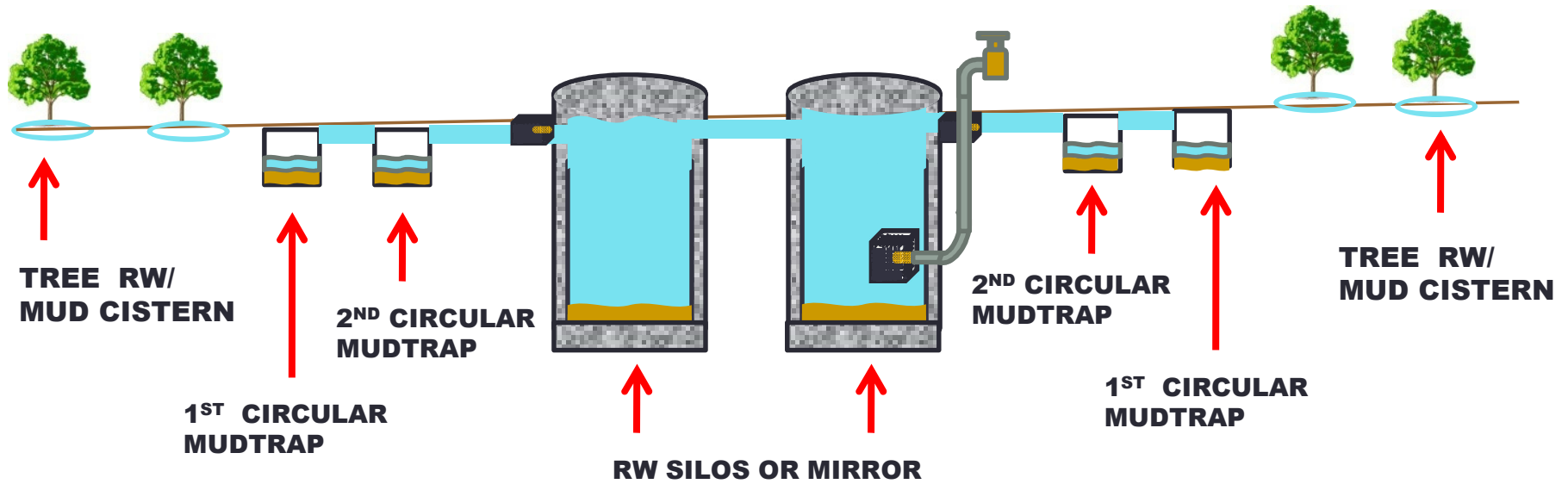
CROSS SECTIONAL VIEW OF GREEN ZONE - HIGHER GROUND TO LOWER GROUND AS
ENGINEERING INTERVENTION TO CUSHION EFFECTS OF CLIMATE CHANGE, WATER CRISIS &
DISASTERS

GREEN ZONE

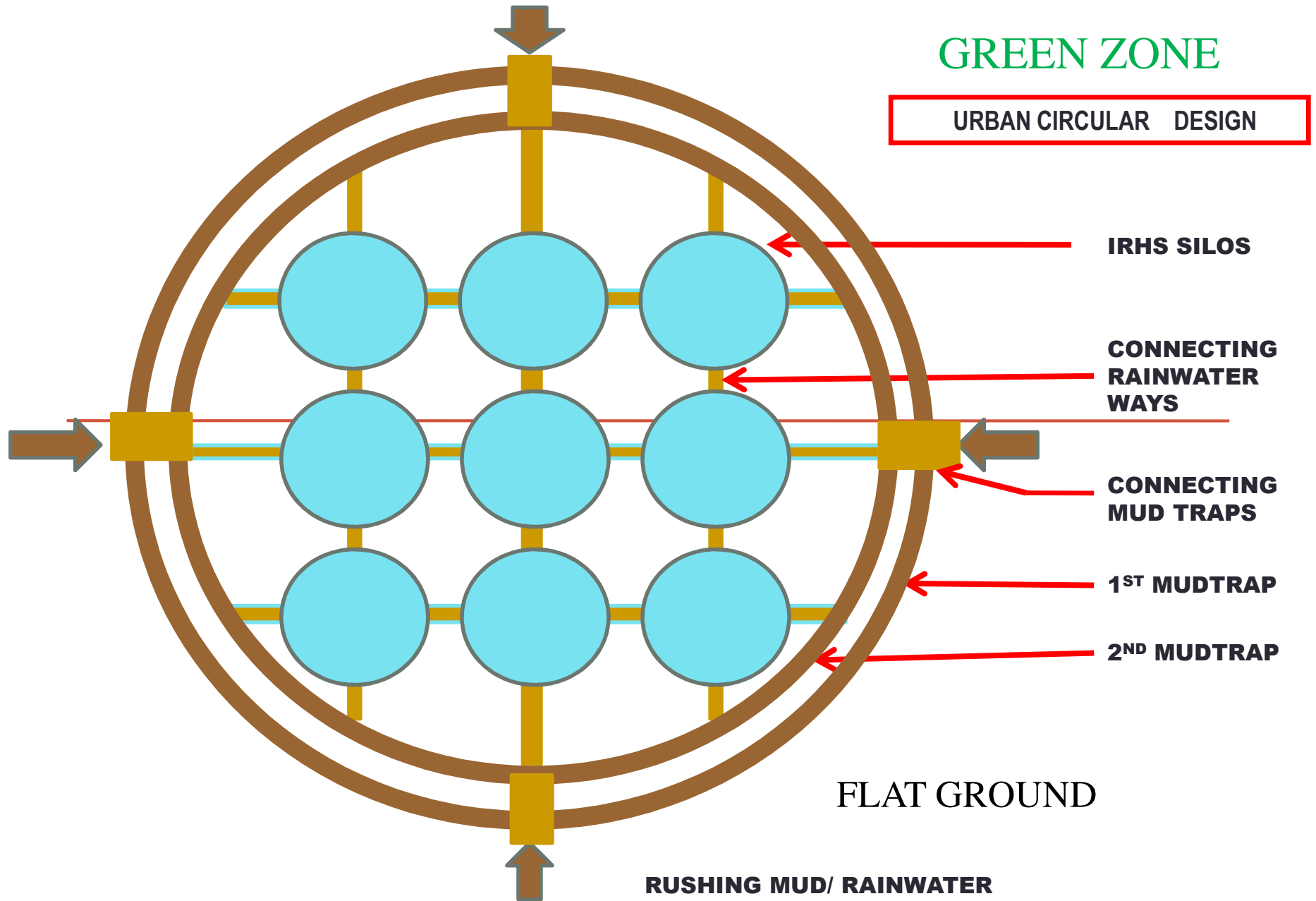


CROSS SECTIONAL VIEW OF GREEN ZONE - FLAT SURFACE AS ENGINEERING INTERVENTION TO CUSHION EFFECTS OF CLIMATE CHANGE, WATER CRISIS & DISASTERS

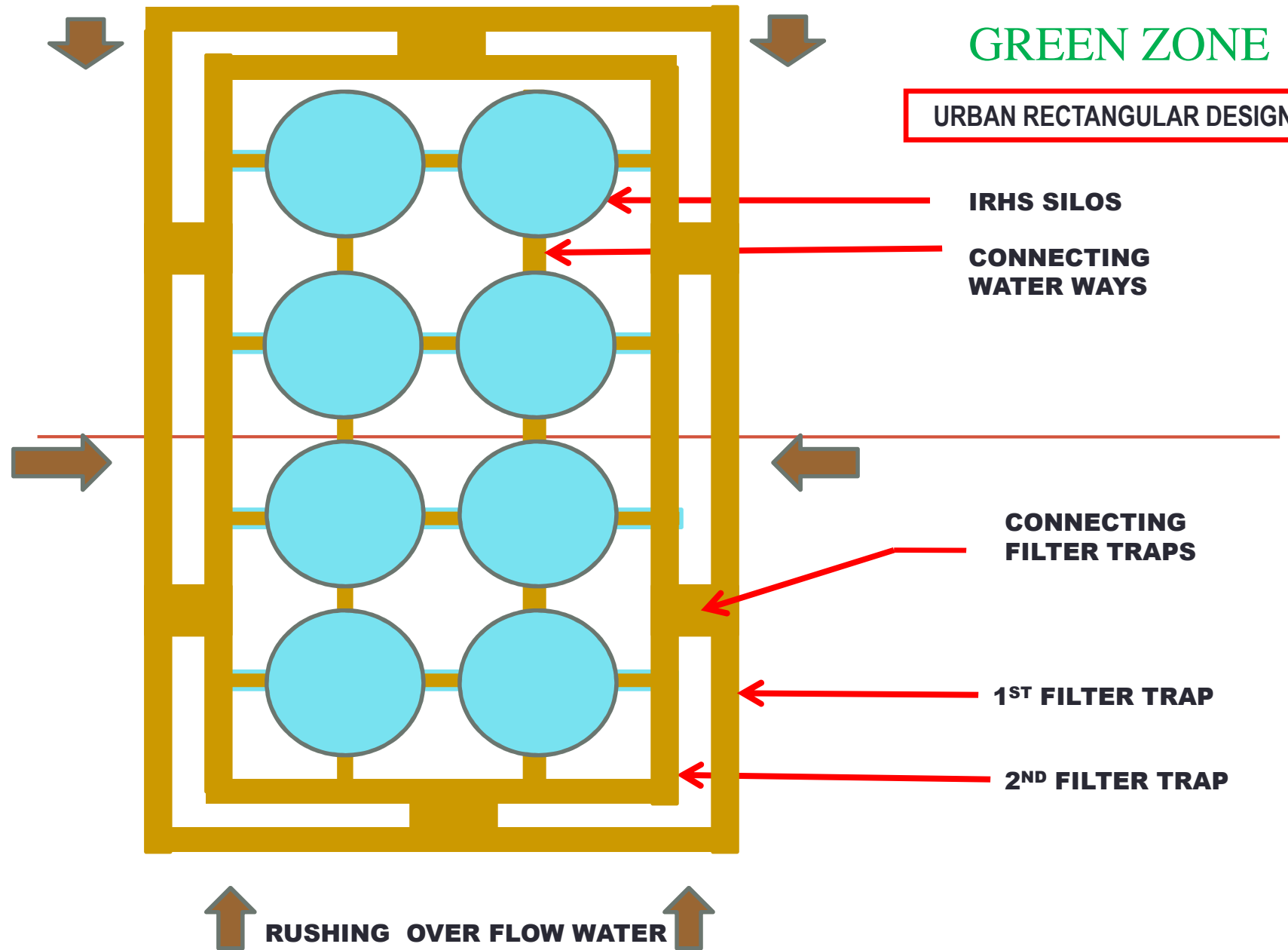
GREEN ZONE



ENGINEERING INTERVENTION IN URBAN FLOOD PRONE AREAS / ADDITIONAL WATER SOURCE :
INNOVATIVE RAINWATER MULTI-PURPOSE SILOS



ENGINEERING INTERVENTION : SERIES & PARALLEL PROTECTIVE MULTI-PURPOSE SILOS



REMEMBER

Developing an invention is like a Creation, a miraculous act. Without the creation of many inventions, Civilization will not prosper and without innovations, mankind will not enjoy the convenience of life



Finally, Please Remember

COUNTRIES ARE PROGRESSIVE WHOSE GOVERNMENT HAVE POLICIES AND PROGRAMS WHICH ENCOURAGE THE ESSENTIAL CREATIVITY OF MAN. THE LACK OF RESOURCES CAN BE OVERCOME BY THE DEPTH OF COMMITMENT OF THE PEOPLE WITH THE MISSION AND VISION OF ACHIEVING GRANDIOSE GOALS

SUCCESS AND PROGRESS ARE THEREFORE ABOUT GOOD GOVERNANCE AND POLICIES, THE COMMITMENT AND GOOD INTENTIONS OF THE HUMAN SPIRIT AND THE CREATIVITY OF THE HUMAN RESOURCE

DEAN ANTONIO F. MATEO, Ph.D

THANK YOU!!



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