



DEPARTMENT OF SCIENCE AND  
TECHNOLOGY - XI



# Innovation from the Ground Up: the Grassroots Innovation for Inclusive Development Program

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# CONTENT



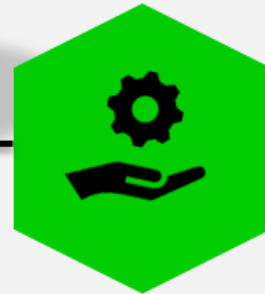
DEPARTMENT OF SCIENCE AND  
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**Importance of Grassroots Innovation  
to Economic Development**



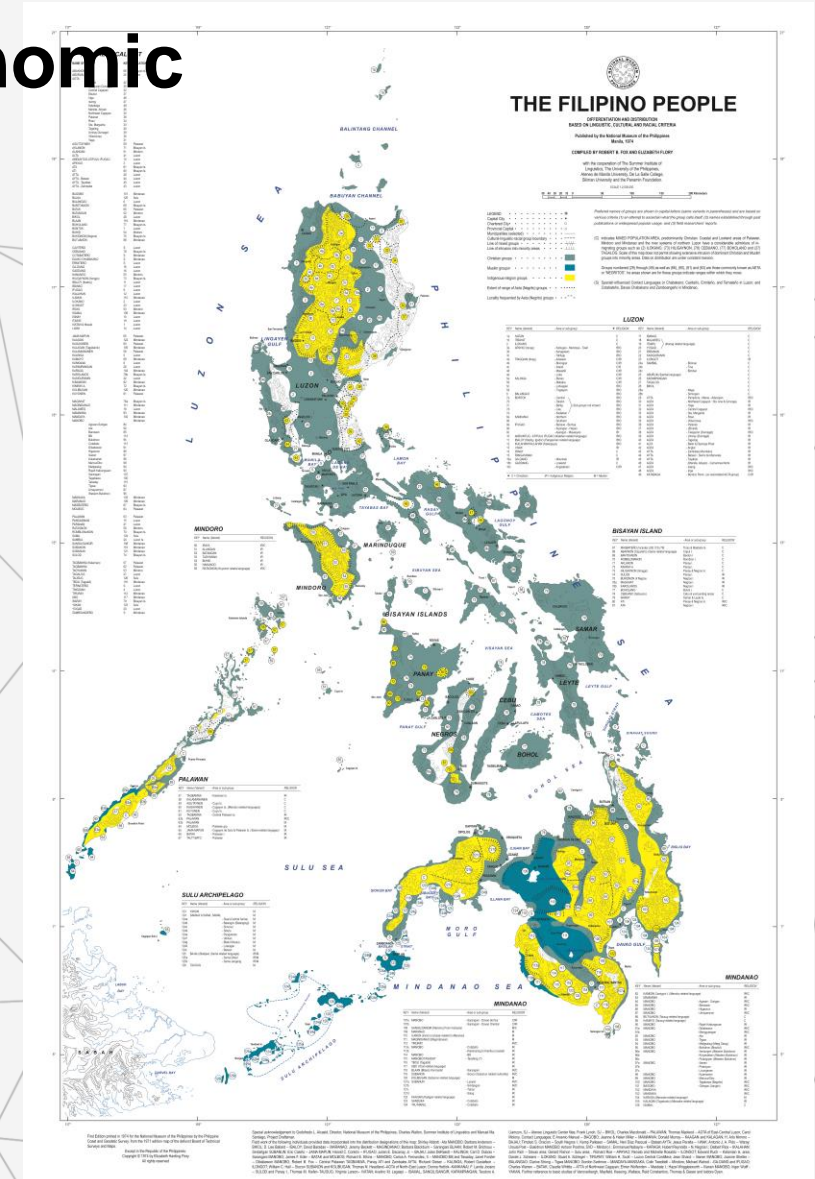
**Grassroots Innovation for Inclusive  
Development (GRIND) Program**



**Concluding Remarks**



# Importance of Grassroots Innovation to Economic Development



## Situationer on Grassroots Innovation:

### GRASSROOTS INNOVATIONS IN THE PHILIPPINES: FACTORS HINDERING

The Philippines performs better innovation outputs than innovation inputs in 2021.

Primary factors that hinder Grassroots Innovations (GIs) in the Philippines are the (a) **Lack of Awareness of Grassroots Innovators**, (b) **Disestablished GI Framework Plan**, and (c) **Lack and/or limited R&D support and funding/budget from the national government**.



# The Philippines' GRIND Program

The Department of Science and Technology has been in the forefront of promoting inclusive Science, Technology, and Innovation (STI) policy in order to make science, technology, and innovation more accessible to the poor and underprivileged.

In the Philippines, Grassroots Innovation (GI) is currently unappreciated and underfunded. This necessitates a significant expansion of the sector.

Grassroots Innovation for Inclusive Development is a pioneering program of the Department of Science and Technology (DOST) that aims to empower marginalized communities by developing and strengthening its existing Grassroots Innovations (GIs) and establishing the GRIND Program. It is a timely community-based initiative of the DOST in the combat against CoVID-19 and the New Normal, and this enables marginalized communities to adapt to the current and upcoming changes posed by any pandemic.



# GRASSROOTS INNOVATION (GI)?

Grassroots Innovations, are **innovative products, process or technology** created by people from the countryside, usually due to necessity, hardship or challenges.

- Build on existing knowledge, systems and practices
- Capitalize on existing or indigenous resources i.e. people with their culture, knowledge, systems and practices; available natural and physical resources
- Composite of indigenous/locally developed and introduced innovations
- Contribute to the attainment of Sustainability, SDGs
- Address problems and concerns emanating from the grassroots
- Address the triple bottom lines at the community level



# The Philippines' GRIND Program

WHAT ARE THE  
**GRASSROOTS  
INNOVATION (GI)**  
**CATEGORIES** UNDER  
THE **GRIND** PROGRAM?

02

Traditional crafts and trades that are at risk of dying out in the succeeding generation.

04

Innovations addressing public health issues/hazards emerged among marginalized communities

Heirloom  
Recipe/Heritage Food

Artisanal/Endangered  
Crafts

Ethnobotanicals

GIs Addressing Health  
Hazards

01

Edible plant varieties that have been grown through the early parts of the communities' history and are distinct from commercial varieties and have unique colors, textures, and tastes not found in factory-farmed industrial produce.

03

Region's plants and their practical uses through the traditional knowledge of a local culture and people.

# The Philippines' GRIND Program

## EXAMPLES OF GRASSROOTS INNOVATIONS



Artisanal/Endangered  
Crafts



Gis Addressing Health  
Hazards

Heirloom  
Recipe/Heritage Food



Ethnobotanicals





# The Philippines' GRIND Program

EXAMPLES OF GRASSROOTS INNOVATIONS IN THE  
CONTEXT OF PANDEMIC AND THE *NEW NORMAL*

**Foot-operated  
Handwashing kiosks**



**DisinfecTent**



**Affordable Face  
masks**



**Emergency food  
product/s**



**Immunity Booster  
products**



# The Philippines' GRIND Program

## GENERAL OBJECTIVE:

To empower marginalized communities and build their resilience to counter COVID-19 pandemic and other emergencies through the development and deployment of grassroots innovations in Davao Region.

Develop GRIND Program implementation guidelines for scaling-up to a National Program.

Recommend and lobby policies related to grassroots innovations and innovators to the Regional Development Council and/or local legislative bodies; and

06



05



04



03



02



01



Identify GIs that address resiliency among marginalized communities;

Provide assistance in the production and commercialization of GIs;

Assist the communities in addressing the need for sustainable livelihood and in providing alternative source of income;

Develop and strengthen the network of advocates/experts to support GIs;



# The Philippines' GRIND Program

## GRIND FRAMEWORK PLAN FOR CY 2019-2022



DOST execs, dignitaries and speakers during the launching of the GRIND Framework Plan on July 20, 2019 at the Hotel Jen Manila by Shangri-la, Pasay City.



Sec. Fortunato T. Dela Peña together with Dr. Mia Mikic, presenting the GRIND 2019-2022 Framework Plan.



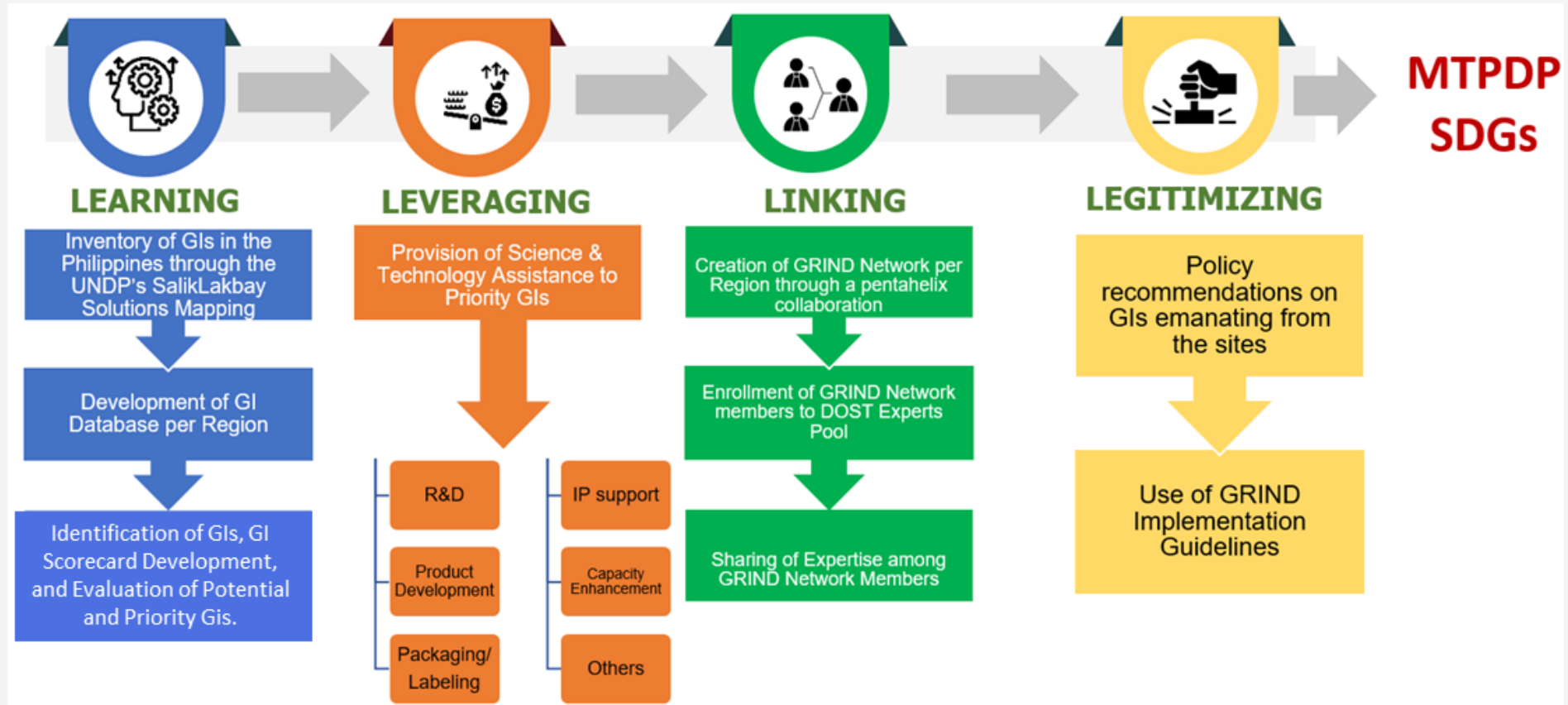
# The Philippines' GRIND Program



- The Grassroots innovation for Inclusive Development (GRIND) 2019-2022 Framework Plan aims to steer progress towards empowering Filipinos in achieving the **AmBisyon Natin 2040** by promoting inclusive growth and reducing poverty and equality.
- GRIND aims to further support the UN's **Sustainable Development Goals (SDGs)**, **Philippine Development Plan (PDP) 2017-2022** and the **Philippine Innovation Act or Republic Act 11293**.
- Incorporates the participation of the government, civil society organization, academe, industry sector and media (a **pentahelix collaboration**).

# The Philippines' GRIND Program

## GRIND FRAMEWORK PLAN



# The Philippines' GRIND Program

## SalikLakbay Solutions Mapping

Identification/Inventory of Grassroots Innovations for possible funding thru the “SalikLakbay Solutions Mapping Adventure”

SalikLakbay activity involves Participatory Rural Appraisal (PRA) and Focus Group Discussion (FGD).

PRA refers to the community engagement done during SalikLakbay and this will further be followed by the FGD for the presentation of identified GIs and lobbying of possible S&T intervention and assistance.



### How do we identify grassroots innovations?

- Community engagement
- Field Research
- *UNDP's SalikLakbay Solutions Mapping*



### What is SalikLakbay?

***Saliksik + Lakbay = SalikLakbay***  
an activity that brings together curious individuals to embark in an epic journey of solutions mapping in grassroots communities.



# Learning Component

To date, there are 185 grassroots innovations identified in Davao Region.



# GRIND Framework Plan for CY 2019-2022

## Leveraging Component

- 4 GIS Funded
- 1 GIs deployed
- 3 GIs assisted in Intellectual Property Protection
- 12 GIs assisted in R&D, Product Development, Capacity Building

Vacuum Fried



# GRIND Framework Plan for CY 2019-2022

## Linking Component

Establishment of partnerships/ collaborations/ linkages with the government, industry, the academe, the civil society sector, the media (penta-helix collaboration approach).

Creation of GRIND Network in Davao Region.



GRIND Network members during the first SalikLakbay Solutions Mapping Training-Workshop in Davao City last March 6, 2020



# GRIND Framework Plan for CY 2019-2022

## Linking Component - The DOST - Becoming Filipino Partnership

Kyle Douglas "Kulas" Jennermann, also popularly known by his YouTube channel name Becoming Filipino, is a Canadian Blogger/Vlogger and Influencer from Comox, British Columbia. He was officially recognized on May 14, 2021 as the Program **Ambassador of the Department of Science and Technology Region XI's Grassroots Innovation for Inclusive Development (GRIND)** Program.

### Why Kulas?

Kulas was chosen as the Program Ambassador because he has the characteristics of being a "SalikLakbayer" (SalikLakbay participant/researcher). He embodies what it is to be a SalikLakbayer. With the many adventures he has done, he has been featuring the innovativeness and creativity of the Filipinos through the solutions they created as a response to a social need.





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# GRIND Framework Plan for CY 2019-2022

## Legitimizing Component

Formulation, endorsement  
and issuance of policy brief  
for the GRIND.



Republic of the Philippines

REGIONAL DEVELOPMENT COUNCIL XI

DAVAO REGION

RDC XI Resolution No. 122, Series of 2020

ENDORSING TO RDC XI THE ADOPTION OF THE GRASSROOTS INNOVATION FRAMEWORK OF THE GRASSROOTS INCLUSIVE INNOVATION (GRIND) PROGRAM OF THE DEPARTMENT OF SCIENCE AND TECHNOLOGY (DOST) IN ALL EFFORTS TOWARDS LEVERAGING, LINKING, AND PROMOTING GRASSROOTS INNOVATION IN DAVAO REGION

**WHEREAS**, the Grassroots Inclusive Innovation Program (GRIND Program) is a community-based initiative of DOST XI in the combat against COVID-19 and the new normal, as it will promote inclusive development and build the resilience of marginalized communities tot disasters and emergencies countrywide;

**WHEREAS**, the program shall employ the Penta-helix approach through partnerships among the government agencies, industry sector, academe, civil society organizations, and media;

**WHEREAS**, this program enables the communities to adapt to the current and upcoming changes posed by this pandemic through the development of grassroots innovations that promotes empowerment and builds resilience among marginalized communities in Davao Region and ultimately the whole community;

**WHEREAS**, the Grassroots Innovation Framework on the GRIND Program includes the 4Ls, viz: Learning, Leveraging, Linking, and Legitimizing the grassroots innovation (GI) and sets out the vision, targets and strategies by leveraging, and fostering the GI ecosystem, as well as, institutionalizes policies and investments to support and sustain the GI ecosystem;

**WHEREAS**, the Regional Research, Development and Innovation Committee (RRDIC) XI deemed it important to adopt the Grassroots Innovation Framework of the Grassroots Inclusive Innovation Program (GRIND Program) towards promoting inclusive development and building resilience of marginalized communities to disasters and emergencies; **now, therefore, be it**

# Concluding Remarks

- GRIND Program is expected to improve innovative capacity and spur more innovative activities in grassroot communities.
- The GRIND Program will result in sustainable livelihood and enterprises that will improve the quality of life of the people in the margins.





**THANK YOU**