Week 3 Milestone Worksheet

Instructions: Provide responses to all items in the boxes. The worksheet consists of Sections A-E. Work on this worksheet one section at a time throughout your week, and return to Savanna after each section for the next set of content and further instructions.

SECTION A: Problem Statement

Step 1: Your GCGO

Which Grand Challenge or Great Opportunity (GCGO) do you want to play a part in addressing? (Pick one.)

As a reminder, the GCGOs are:

- Urbanization
- Education
- Infrastructure
- Healthcare
- Climate change
- Governance
- Job creation

- Agriculture
- Natural resources
- Arts, culture, and design
- Tourism
- Empowerment of women
- Regional integration
- Wildlife conservation

GCGO: **Job creation**

Step 2: Describe Your Problem

You are going to take a first pass at briefly describing <u>your</u> chosen problem. This can be any problem that speaks to you, as long as it is a real-life occurrence that is clearly linked to your chosen GCGO, that occurs in a certain place and for certain people (and/or animals), and that it can be clearly defined.

For example, if you chose wildlife conservation as your GCGO, you might first state your chosen problem as:

There are very few white rhinos left in Kenya, and they are in danger of becoming extinct.

Another example is if you choose infrastructure as your GCGO:

Residents of major cities in South Africa endure prolonged periods without electricity, significantly hampering their ability to generate income.

Note that this is just your first attempt at stating the problem, and you don't need to quantify it yet. In order to get to your official problem statement (which does need to be quantifiable), first answer the following questions. The more specific your answers, the better. You may also ask Google, Wikipedia, ChatGPT, and/or other reliable online sources to help you. Please be sure to cite (give credit to) any sources that you use.

Describe your problem using What/Who/When/Where/Why/How....

<u>What</u> is the problem? The core problem is **unemployment and underemployment**.	

Millions of people around the world, especially young graduates and low-skilled workers, struggle to find decent jobs.

What is reality like because of this problem?

Many people live in **poverty** and cannot meet basic needs.

Young people lose hope, which can lead to crime, migration, or social unrest.

What will the reality be like if the problem continues?

There will be **greater social instability** — protests, insecurity, and migration will increase.

Poverty levels will rise, especially in developing nations.

Who does this problem impact, directly and indirectly?

- Job seekers
- Low-Skilled and Informal Workers
- Families and Communities
- Small Businesses
- Governments
- Private sectors

Who contributes to the problem?

- Governments
- The Education System
- Employers and Industries

When did this problem begin?

- Post-industrial shift (1980s–1990s)
- Globalization (1990s–2000s)
- Education–industry gap

When does it occur?

- Economic downturns
- After graduation seasons

• During technological transitions	
Where is this problem occurring? • Globally • In developing countries(like Nigeria and other African countries) • In Urban Areas What is the context in which it occurs? • Economic Context • Educational Context • Industrial Context	

Area	**Pain Point / Gap**
Education	**Schools often teach theory but not employable or entrepreneurial skills.**

Technology   **Lack of access to digital tools and training leaves many people behind.**

Investment   **Few investors support small businesses or startups that create jobs.**

Infrastructure   **Poor electricity, internet, and transportation limit business growth.**

Step 3: Understand and Quantify Your Problem

Next, you will conduct some basic web research to better understand, define, and quantify your problem. You will do this through a combination of Google search, Wikipedia, credible web sources, ChatGPT or other AI research tools, and your own synthesis of information from these sources. Be sure to give credit to your sources, and paraphrase (use your own words) rather than quoting directly.

> What is the historical context for this problem?
>
> - Historical Background
> - Education and Skills Mismatch
>
> What happened in the past that contributes to the problem now?
>
> - The roots of the job creation problem lie in a history of limited industrialization, weak education systems, and dependence on single-resource economies. Colonial economic models focused on

exports, not local job growth. Post-independence governments continued this pattern, leading to poor diversification and underinvestment in skill development. Combined with political instability and slow adaptation to technology, these historical factors have created the high unemployment crisis we face today

What are the possible economic (money-related) reasons why this problem exists and continues?

- Limited Access to Capital for Entrepreneurs
- Poor Investment Climate
- Overdependence on One Sector (Like Oil or Agriculture)

What are the possible political reasons why this problem exists and continues?

- Poor Governance and Corruption
- Inconsistent Government Policies

What cultural beliefs and/or social norms possibly contribute to this problem?

- Preference for White-Collar Jobs Over Skilled or Manual Work

- Dependence on Government Employment

Who are the people potentially responsible (directly or indirectly) for creating and/or maintaining this problem?

- Government and Policy Makers (Direct Responsibility)
- Educational Institutions
- Society and Cultural Influences (Indirect Responsibility)

Now that you have the preliminary information you need, you'll continue your web research to find some numbers, or quantifiable information, to help describe your problem:

What numerical data can you find that is relevant to your problem? Be sure to use your own words and also cite (give credit to) your sources.

Example 1:

According to Chat GPT, there are about 880 white rhinos currently living in Kenya. This population is very small, and they are critically endangered.

Example 2:

Johannesburg has approximately 5.8 million residents (per ChatGPT) and had approximately 4.7 million international overnight visitors in 2019 (according to the South African Tourism Annual Report for 2019/2020).

Approximately how many people (and/or animals) are **directly** impacted by this problem? Explain. • Estimated Number of People Affected- In Nigeria alone (as an example context), **over 23 million people** are currently unemployed or underemployed according to the National Bureau of Statistics (NBS). • Of this number, **youths between ages 18–35** make up more than **60–65%** of the unemployed population.	
Approximately how many people (and/or animals) are	

indirectly impacted by this problem? Explain.

- **Families and dependents** of unemployed individuals who rely on them for financial support.

- **Children**, whose education and wellbeing suffer when parents cannot afford school fees or healthcare.

- **Small businesses**, which experience fewer customers due to reduced household spending.

Statistic	What it shows / why it matters
Youth unemployment globally (~2023–2024)	The global youth unemployment rate (ages ~15-24) is about **13-14%**, which amounts to **~65 million young people** without work

Step 4: Describe Your Solved State

Without having to come up with *how* to solve the problem, describe what the desired, solved state looks like. Please use numbers wherever possible, and make your solved state-specific and measurable.

Example 1:

There would be a population of 10,000 healthy and protected white rhinos living in the wild in Kenya.

Example 2:

All 5.8 million residents of Johannesburg would have affordable and consistently available power from clean energy sources, 99.5% of the time.

If the problem were addressed/solved, what would reality be like?

- Improved Standard of Living
- Economic Growth and Stability
- Growth of Innovation and Entrepreneurship

Are there other benefits that would come from your problem being solved?

yes

Name at least one.

Reduction in Crime and Insecurity

Increased Innovation and Creativity

Step 5: Clarify Your Problem Scope

You are more effective at solving a problem when you know where its limits are. That is, when you know what is "in scope" and "out of scope." For this reason, it is important to list what is out of scope, or NOT included as part of your problem definition.

Example 1:

The scope of the problem does not cover any other animal species besides white rhinos. It does not include white rhinos outside of Kenya.

Example 2:

The scope of the problem does not include any businesses or people outside of the legally-defined Johannesburg city limits. It does not apply to tourists or visitors staying for less than 1 year in Johannesburg.

What is NOT in the scope of your problem?

Global Unemployment: The problem does **not** cover worldwide unemployment — it focuses mainly on **local or national job creation**, especially within communities or developing regions

Private Corporate Layoffs:

> The problem does not directly deal with **corporate downsizing or company-level job cuts**, since those are internal business decisions beyond the project's control.

Step 6: Areas for Learning

What do you not know or understand that you would like to know more about? This can be anything related directly or indirectly to your problem. Let your curiosity run wild!

Example 1:

I'd like to know where most of the demand for rhino horn is coming from. I'd like to know who are the primary buyers and who is behind the trafficking of rhino horn. I'd like to know how long the average rhino's lifespan is. I'd like to know how many babies a typical female rhino has, and how many babies typically survive into adulthood. I'd like to know more about what diseases impact rhinos. I'd like to know more about the kinds of habitats that rhinos thrive in. I'd like to understand what international organizations do the best job supporting wildlife conservation and what their practices are. I'd like to know what models of community involvement have been most successful in keeping wildlife safe and thriving. I'd like to understand how much land is available in Kenya for rhinos to roam.

Example 2:

I'd like to better understand the utility company Eskom and its history. I'd like to understand why Eksom has failed to plan properly to update its infrastructure. I'd like to understand the relationship between Eksom and the South African government. I'd like to know if there are private utility companies providing competition to Eksom.

I'd like to know what the latest breakthroughs are in solar power. I'd like to know what other possible energy sources might be made available in Johannesburg. I'd like to know how much energy tourists and temporary visitors use. I'd like to better understand the process of how limited energy supply gets allocated to people and businesses. I'd like to better understand the economic impact on people and businesses of not having power.

What else would you like to know or understand better? (It can be anything related to your problem.) List 5-10 things.

- What specific skills are most lacking among unemployed youths in my community?

- How effective are current government programs or initiatives in creating sustainable jobs?

- What are the biggest challenges small businesses face when trying to hire new employees?

- How does the level of education affect job opportunities in different regions?

- What role can technology and digital skills play in increasing employment rates?

- How do cultural beliefs or family expectations influence people's career choices?

- Why do some job creation programs fail to produce long-term results?

- How can vocational training and entrepreneurship be better supported locally?

- What incentives could motivate private companies to create more jobs?

- How can community-based initiatives contribute to reducing unemployment among youth and women?

Step 7: Problem Statement

This step is the culmination of all you have done in Part A. You will synthesize the work you have done above to create a problem statement of 150 - 250 words. This should be in narrative form, 2-4 paragraphs, and should NOT use bullet points.

Your problem statement should:

- Provide a succinct description of the problem **in the first sentence**.

- Indicate the specific population affected

- Explain the impact (cost, time, environmental, personal) and why the problem matters.

- Explain what reality would be like if the problem were solved. The gap between present reality and the desired outcome should be clear.

Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting and instead paraphrase (use your own words), as modeled in the example. Also, list your sources and their URLs (web addresses) at the end.

Example :

Kenya's white rhinos are in critical danger of extinction. There are currently about 880 white rhinos in the country of Kenya, per Wikipedia. According to Chat GPT, Rhinos are considered a keystone species, meaning they have a disproportionately large impact on their ecosystem compared to their population size. Rhinos help shape their environment by influencing vegetation growth and acting as seed dispersers, which creates habitat for other species (per ChatGPT).

The extinction of white rhinos would have cascading effects on other plant and animal species in their habitat. According to the Kenya Wildlife Service, rhinos' presence in reserves and parks brings millions of tourists each year, contributing to local economies and supporting conservation efforts. Once a species goes extinct, it is gone forever. The extinction of rhinos would represent the loss of millions of years of evolutionary history and unique genetic diversity that science has yet to fully understand and benefit from (per ChatGPT).

My problem would be considered solved when the population of wild, white rhinos in Kenya reaches 10,000, and when all imminent threats to their population including poaching and habitat destruction are not present. If this were the reality, it would create ecosystem balance, create large revenues from ecotourism, preserve important cultural symbols, and allow for genetic diversity that could benefit humanity in ways we may not yet fully understand.

Sources:

Kenya Wildlife Services Annual Report 2017, https://www.kws.go.ke/content/annual-reports

ChatGPT, https://chat.openai.com/

"White Rhinoceros", Wikipedia, https://en.wikipedia.org/wiki/White_rhinoceros

My problem is statement is:

Unemployment remains one of the most pressing challenges in Nigeria today, particularly among the youth population. According to the National Bureau of Statistics (2024), Nigeria's youth unemployment rate stands at about 33%, meaning that millions of educated young people are unable to find stable work opportunities. This problem directly affects individuals between the ages of 18 and 35, many of whom struggle with poverty, lack of independence, and frustration due to limited access to sustainable employment. Indirectly, unemployment also impacts families and the national economy through increased dependency rates and reduced productivity.

The lack of effective job creation programs, inadequate vocational training, and slow private-sector growth have all contributed to this problem. If this situation continues, more young people may turn to unsafe migration, crime, or hopelessness, further worsening economic instability. However, if job creation

efforts are strengthened through entrepreneurship programs, digital skills training, and small-business support, the reality would shift significantly. Young people would become more productive, self-reliant, and innovative, leading to national growth, reduced poverty, and improved community wellbeing.

Please list all sources that you used to form your problem statement:

National Bureau of Statistics (NBS), "Nigeria Labour Force Report Q1 2024," https://www.nigerianstat.gov.ng

ChatGPT, https://chat.openai.com/

STOP Please go back to Savanna and continue with your learning content. You will be prompted on when to return to complete Section B.

What are some ways can we increase rhino populations?

Hypothesis:

Rhino populations will increase by creating more open spaces for them to roam, increasing their protection, increasing international interest in them, and for other reasons, I have yet to uncover.

Example Research Question #2:

Which organizations have been effective at wildlife conservation and what practices do they use?

Hypothesis:

Not applicable; I don't know.

Example Research Question #3:

How many babies can a typical female white rhino have in her lifetime, and what are the reasons a female may not have high fertility?

Hypothesis:

A typical female white rhino can have 5 babies in her lifetime, and fertility may be affected by diet, amount of grazing territory, poaching, stress, mate availability, and other reasons I have yet to uncover.

Research question #1:

What are the most effective strategies for increasing rhino populations in the wild?

Hypothesis (if applicable):

Rhino populations will increase through a combination of habitat expansion, stronger anti-poaching enforcement, community-based conservation programs, and international awareness campaigns.

Research question #2:

Which organizations have been most effective at wildlife conservation, and what practices contribute to their success?

Hypothesis (if applicable):

Not applicable; this is an exploratory question aimed at identifying successful models and practices.

Research question #3:

How many offspring can a typical female white rhino produce in her lifetime, and what factors influence her fertility?

Hypothesis (if applicable):

A typical female white rhino can have around 5 calves in her lifetime. Fertility may be influenced by nutrition, territory size, stress levels, poaching threats, mate availability, and other environmental or biological factors.

STOP **Please go back to Savanna and continue with your learning content. You will be prompted on when to return to complete Section C.**

SECTION B: Research Questions & Hypothesis

IMPORTANT: Complete this section AFTER completing the Savanna Modules *Asking Effective Questions* and *conducting web research.*

Step 8: Research Questions

Based on what you have learned so far and on 'Step 6: Areas for Learning' from this worksheet, come up with 3 research questions. **Research questions should be complex enough that they can't be answered by a single Google search.** If appropriate, form a hypothesis that your research may confirm or reject. (As a reminder, a hypothesis is a prediction of how you think your research will answer your

research question. It is your best guess. If you truly have absolutely no idea, state "not applicable.")

Research Question #1:

What combination of conservation strategies has proven most effective in increasing white rhino populations in East Africa over the past decade?

Hypothesis: A combination of habitat expansion, community-based conservation, and international funding has led to measurable increases in white rhino populations in East Africa.

Research Question #2:

How do cultural beliefs and local attitudes toward wildlife conservation influence the success of rhino protection programs in Kenya?

Hypothesis: Positive cultural attitudes and community involvement significantly enhance the success of rhino protection efforts, while negative perceptions or lack of awareness hinder progress.

Research Question #3:

What biological and environmental factors most significantly affect the fertility rates of female white rhinos in protected reserves?

Hypothesis: Fertility rates are most influenced by access to adequate grazing territory, low stress environments, and availability of genetically diverse mates, with poaching and habitat fragmentation acting as major negative factors.

PART C: Peer Activity Report

IMPORTANT: Complete this section AFTER completing the Savanna Lessons "Hub Activity: Problem Statement" and "Hub Activity: Web Research."

Peer Activity #1: Problem Statement

Please report on your process of getting peer feedback.

Who reviewed your problem statement (item #19)?

My Boss and My Friend

(Give the first and last names of your 2 peers.)

- Surajudeen Opeyemi
- Oluwaseun Daniel

In brief, what feedback did they give to you?

I was told to keep improving on my research and

I was told to not to relent no matter the challenges on my learning ways

Was their feedback useful to you?

Yes, it is

Did it feel kind?

Yes, very kind

Why or why not?

It is because, they both are giving me words of encouragement

Who did you give feedback to?

My boss and my friend

(Give the first and last names of 2 peers- they may be the same or different peers from above.)

- Surajudeen Opeyemi
- Oluwaseun Daniel

Do you feel that you gave useful and kind feedback to your peers?

Yes, I do

Why or why not?

It's so because, the feedback gives me additional knowledge and more understanding

STOP

After you updated earlier parts of the worksheet based on your feedback, please go back to Savanna and continue with your learning content. Return to Part E prior to submitting your milestone.

PART D: Daily 3 Challenge Report

Please answer the following questions honestly. There are no wrong answers! This is your opportunity for self-reflection.

How many days out of the past 7 did you do 20 minutes of movement?

3 days

Sunday, Tuesday and Friday

How many days out of the past 7 did you write 3-morning pages?

2 days

Monday and Thursday

Overall, how do you feel you are doing on building your Daily 3 habits?

I feel good and realistic

Explain.

The daily movement give me more strength, the morning pages stimulate my thinking and the meditation gives me reason to reason well

What is your biggest barrier to staying motivated?

My biggest barrier is inconsistency in my daily routine. When unexpected tasks or distractions pop up, it's easy to lose momentum and skip the habits that keep me grounded.

If you have been practicing at least some movement and/or morning pages:

A) What effect (if any) have you noticed on your mood, focus, and productivity?

I've noticed that even 20 minutes of movement helps clear mental fog and boosts my energy. Morning pages give me clarity—they help me process emotions and set intentions, which makes my day feel more purposeful.

B) What helps you stay motivated?

Tracking progress and celebrating small wins keeps me going. Also, knowing that these habits improve my mental health and creativity makes them feel worth the effort.

 If you haven't been practicing any movement and morning pages, what would motivate you to get started?

What would motivate you to get started? Having a supportive accountability partner or a structured challenge would help. Also, seeing real-life examples of how these habits improve others' lives would inspire me to commit.

Once you have completed this worksheet:

1. Export/convert to .pdf.
2. Rename it per the instructions.
3. Upload to Savanna as your Milestone 3 Submission.
4. **Celebrate a job well done!**