



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:

- Urbanization

Step 2: Describe Your Problem

You are going to take a first pass at briefly describing your 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....**

1. **What** is the problem? What is reality like because of this problem? What will the reality be like if the problem continues?

The problem is the lack of affordable accommodation for Ghana's growing youth population. As the number of young people increases, available housing is limited

and expensive, making it difficult for those starting out in life. For instance, some students on national service in Accra had to return to their villages due to the high cost of accommodation. If this continues, many will face similar challenges, limiting their opportunities and mobility.

2. **Who** does this problem impact, directly and indirectly? Who contributes to the problem?

This problem directly impacts low-income Ghanaian youth who struggle to find affordable and quality accommodation in urban areas. Indirectly, it affects students, young professionals, and families who rely on affordable housing for stability. The government, private developers, and urban planners contribute to the problem by not investing enough in affordable housing solutions and failing to address the rising demand for accommodation.

3. **When** did this problem begin? When does it occur?

This problem began in the 2000s when an increasing number of people, particularly the youth, started relocating to cities in search of better opportunities. The surge in migration to urban areas, especially Accra, has led to a strain on existing accommodation infrastructure, creating a gap between demand and supply, resulting in high rental costs and a shortage of affordable housing.

4. **Where** is this problem occurring? What is the context in which it occurs?

This problem is occurring in urban areas of Ghana, particularly in cities like Accra, Kumasi, and Takoradi. The context involves rapid urbanization, with an increasing

number of people, especially the youth, moving to cities in search of better job opportunities and education. The lack of adequate infrastructure to meet the growing demand for accommodation, coupled with high rental costs, has created a housing crisis that disproportionately affects low-income individuals and young people starting their lives in the city.

5. **Why** is this a problem? What are the pain points or gaps? Why do you personally care about this problem?

This is a problem because the lack of affordable accommodation in cities like Accra limits opportunities for many, especially the youth who are trying to start their careers or continue their education. The pain points include high rent, limited availability of rooms, and the additional stress of finding a suitable place to live, which often forces people to live far from their work or education centers.

Personally, I care about this issue because I experienced it firsthand when I had to relocate to Accra for my national service and pursue career opportunities in data science. It was difficult to find affordable accommodation near where I needed to be, and I understand how this issue can restrict access to opportunities, especially for young people looking to build their future..

6. **How** would reality be different if this problem were solved? (This can be your opinion.)

If this problem were solved, I believe it would greatly improve the quality of life for many young Ghanaians. With access to affordable and adequate accommodation, they would have a stable environment to focus on their education, career development, and personal growth. This stability would allow more youth to settle down, have peace of mind, and be in a better position to think

creatively and contribute solutions to the challenges facing Ghana. It could foster a generation of young innovators, entrepreneurs, and professionals who are empowered to build the future of the country..

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.

7. What is the historical context for this problem? What happened in the past that contributes to the problem now?

The accommodation problem in Ghana's cities, especially Accra, stems from rapid urbanization in the 2000s, with many moving to cities for better opportunities. This caused a housing shortage, as infrastructure didn't keep pace with demand. Limited investment in affordable housing, high property prices, and inefficient urban planning have worsened the issue. While the government has made efforts, such as the Affordable Housing Program, challenges like poor land policies and financing have slowed progress. This lack of affordable housing impacts young people, students, and professionals starting their careers.

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

The lack of affordable accommodation in Ghana is driven by high construction costs, limited government investment, and real estate speculation, which make housing prices unaffordable for many young people.

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

The political reasons behind this problem stem from a lack of prioritization of affordable housing by political leaders. Government investments in housing are minimal, leaving the private sector to control the market, often resulting in unaffordable housing options.

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

Cultural beliefs and social norms in Ghana, such as the emphasis on family and community living, can contribute to overcrowding in urban areas. Additionally, there is often a preference for traditional, spacious housing, which can limit the development of affordable, smaller accommodations. Social expectations also create pressure for individuals to live in more established, expensive areas in the city, leading to an increased demand for housing and higher prices.

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

The government is responsible for creating policies and providing support for affordable housing. Real estate developers and property owners play a role by influencing the supply and pricing of housing. Additionally, some landlords and landladies, who set high rental prices, contribute to the lack of affordable accommodation for young people, especially fresh graduates. Indirectly, individuals with the financial capacity to invest in affordable housing also influence the availability of options.

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).

12. Approximately how many people (and/or animals) are **directly** impacted by this problem? Explain.

According to the 2021 Ghana Statistical Service report, the urban population of Ghana has been increasing, with the majority of the growth happening in cities like Accra, Kumasi, and Takoradi. Specifically, Accra, as the capital city, has seen a surge in population, growing by more than 3% annually. The youth population, which is often looking for accommodation after completing their education or national service, is a significant part of this urban migration.

For instance, in Accra alone, the demand for housing has increased by approximately 10–12% annually, but the supply has not kept pace with the demand. This gap affects thousands of young Ghanaians, especially those seeking affordable accommodation in urban centers. Many are forced to relocate back to rural areas due to unaffordable rent prices and limited options.

This means that a large portion of Ghana's youth, potentially hundreds of thousands, are directly impacted by this accommodation issue.

13. Approximately how many people (and/or animals) are **indirectly** impacted by this problem? Explain.

Indirectly, the accommodation problem impacts a wider group, including families, local businesses, and even the broader economy.

For example, the families of young people who move to urban areas are affected as they may need to support their relatives financially or accommodate them temporarily. In addition, businesses that rely on a stable and mobile workforce

(such as those in the tech, education, and service industries) are also impacted because young workers are constrained by housing affordability.

Local communities may also suffer as migration to cities is hindered, meaning fewer people contribute to the local economy in urban areas. Additionally, real estate developers and investors who could benefit from a more competitive housing market are also indirectly affected by the lack of affordable housing options.

Altogether, the ripple effect of this issue may affect several hundred thousand people, if not more, as it touches multiple aspects of society, from family units to businesses and industri

14. What other numerical data can you share that is relevant to your problem? What can you find out about its size and scope? What can be measured? (For example, the amount of trash produced in Nairobi each day, the number of people without access to clean water, etc.)

To provide context for the housing and accommodation problem in Ghana, here are some relevant data points:

1. **Urbanization and Housing Demand:** According to the Ghana Statistical Service, approximately 57% of the Ghanaian population lives in urban areas, with the number steadily increasing due to rural-to-urban migration. This urban migration places significant pressure on the availability of housing in major cities like Accra.
2. **Housing Deficit:** Ghana currently faces a housing deficit of about 2 million units, which has been growing over the years. The demand for housing is projected to grow by an additional 250,000 units per year (source: National

Housing Policy, Ghana). This shortage has led to skyrocketing rental prices, especially for young people and students moving to cities.

3. **Real Estate Prices:** According to a report by the World Bank in 2020, housing prices in major cities like Accra have increased by 50–70% over the past decade. This makes it more difficult for the younger generation and low-income families to find affordable accommodation.
4. **Affordability:** The average cost of rent in Accra for a one-bedroom apartment in the city center can be as high as GHS 1,500–2,000 per month (approximately USD 150–200), which is unaffordable for many young people starting their careers. (Source: Local real estate listings)

These figures clearly show that the housing problem in Ghana is not only large in scale but also continues to grow in scope due to urbanization, economic pressures, and an inadequate supply of affordable housing options.

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.

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

If the accommodation infrastructure problem in Ghana were solved, there would be a significant increase in affordable housing, reducing the current deficit of 2 million units by 50%. Rent prices would drop by 30–40%, making it more affordable for youth and recent graduates, with typical one-bedroom apartments costing no more than GHS 800–1,000 per month. Youth migrating to cities like Accra would have better access to housing, reducing overcrowding and informal settlements. This would improve career opportunities for young people and contribute to more stable urban growth, benefiting the economy and social well-being.

16. Are there other benefits that would come from your problem being solved?
Name at least one.

One major benefit of solving the accommodation infrastructure problem would be the reduction in rural–urban migration challenges. With affordable housing in cities, fewer people would be forced to leave their hometowns in search of opportunities, which could ease the strain on rural communities while promoting balanced urban development.

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.

17. What is NOT in the scope of your problem?

The scope of this problem does not include rural accommodation issues or infrastructure challenges outside urban areas. It also does not cover the broader issues of housing quality, such as amenities or building materials, but focuses on the lack of affordable accommodation for youth in urban areas like Accra.

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.

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

1. How do urbanization trends in Ghana impact the demand for affordable housing?
2. What are the key barriers preventing the construction of more affordable housing in Ghana?
3. How can local governments collaborate with the private sector to ensure affordable housing availability?
4. What models of affordable housing from other developing countries could be applied to Ghana's housing market?
5. How do financing options (e.g., mortgages, loans) impact the ability of young people to access housing in urban areas?
6. What role does land ownership and zoning play in limiting the development of affordable housing in urban centers?
7. How do cultural beliefs and attitudes toward renting versus owning property influence housing affordability in Ghana?
8. What are the social impacts of unaffordable housing on the mental and physical well-being of young people?
9. How does the rising cost of living in Accra affect housing prices and rental rates for young professionals and students?
10. What are some potential technological solutions (e.g., construction technology) that could reduce the cost of housing construction?

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

19. My problem is statement is:

The housing crisis in Ghana, particularly in urban areas like Accra, is a growing concern for young people seeking affordable accommodation. As urbanization increases and the population of young people rises, the demand for affordable housing far exceeds supply, leading to skyrocketing rental prices. This problem

impacts young professionals, students, and low-income workers who are unable to afford decent living conditions, hindering their career development, education, and overall well-being. For instance, many students and fresh graduates, even with job opportunities in urban centers, are forced to relocate to more affordable rural areas, which results in a loss of employment opportunities and stunted personal growth. According to the World Bank, housing in Ghana has become increasingly unaffordable, with demand largely outpacing the supply of low-cost housing (World Bank, 2021).

If this issue were resolved, the impact would be transformative. With affordable housing options, young people would have access to stable living environments, reducing the financial and mental burden associated with high rent. This would increase job mobility, access to education, and improve overall quality of life. The problem-solving approach would involve both government action and collaboration with private developers to create sustainable, affordable housing solutions. The availability of affordable housing would significantly contribute to a more equitable society, where young people are empowered to contribute to the nation's growth and development.

Sources:

- World Bank. (2021). Ghana: Affordable Housing in Ghana.
<https://www.worldbank.org/>

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

Here are the sources I referenced to form the problem statement:

1. **World Bank.** (2021). *Ghana: Affordable Housing in Ghana*. Retrieved from <https://www.worldbank.org/>



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

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.")

Example Research Question #1:

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.

21. Research question #1:

What are the primary factors contributing to the high cost and limited availability of accommodation for young people in Ghana's urban areas?

Hypothesis (if applicable):

The high cost and limited availability of accommodation are driven by increased demand from rapid urban migration, lack of government investment in affordable housing, and a focus on luxury housing developments by private developers.

22. Research question #2:

How does the shortage of affordable housing impact the economic mobility and career opportunities of young Ghanaians in urban centers?

Hypothesis (if applicable):

The lack of affordable housing negatively affects economic mobility and career opportunities by forcing young people to live far from job opportunities or to forgo job offers due to accommodation challenges, particularly in cities like Accra

23. Research question #3:

What are the most effective policy measures and government interventions that can address the accommodation crisis for youth in Ghana's urban areas?

Hypothesis (if applicable):

Hypothesis: Effective policy measures may include increased government subsidies for affordable housing, investment in public-private housing partnerships, and the introduction of rent controls or regulations that favor low-income tenants.



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

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.

24. Who reviewed your problem statement (item #19)? (Give the first and last names of your 2 peers.)

Kwasikumah Frank

Yaa Kyere

25. In brief, what feedback did they give to you?

They recommended my work, and motivated me to make it come into reality.

26. Was their feedback useful to you? Did it feel kind? Why or why not?

Yes, it felk kind

Because they understood and felt same as I was feeling about the problem.

27. Who did you give feedback to? (Give the first and last names of 2 peers- they may be the same or different peers from above.)

Kwasikumah Frank

Yaa Kyere

28. Do you feel that you gave useful and kind feedback to your peers? Why or why not?

Yes

Because I understand the problems and I have been a victim before.



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.

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

5

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

2

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

Beyond Average

32. What is your biggest barrier to staying motivated?

Schedules

33. 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?

My system has become active, I am able to stay focus on task.

B) What helps you stay motivated?

My family

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

My family

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!**
-