

# ALX Professional Foundations: Week #3 Milestone Worksheet

**Instructions:** Provide responses to all items in the orange 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.

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## 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: Infrastructure

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## 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 going extinct.*

*Another example, 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 stating the problem, and you don't need to quantify the problem 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 reality be like if the problem continues? Inadequate water infrastructure in rural Nigeria results in many communities lacking access to safe drinking water, leading to high rates of waterborne diseases. Women and girls spend hours fetching water, limiting their educational and economic opportunities. If this problem continues, health issues will escalate, perpetuating poverty and undermining development efforts. Without safe water access, communities will face ongoing inequity, reduced health, and diminished prospects for growth and advancement. Immediate action is crucial.
2. **Who** does this problem impact, directly and indirectly? Who contributes to the problem? The problem impacts rural communities in Nigeria, particularly vulnerable groups like children, women, and the elderly who suffer from health issues and limited opportunities. Women and girls are directly affected as they spend hours collecting water, hindering their education. Indirectly, local economies suffer due to reduced productivity and health burdens. Contributors to the problem include inadequate government investment, poor infrastructure maintenance, and environmental factors that contaminate water sources, exacerbating the crisis.

3. **When** did this problem begin? When does it occur? The problem of inadequate water infrastructure in rural Nigeria has roots going back decades, exacerbated by rapid population growth and urban migration since the 1980s. It occurs year-round, but the impact is most severe during the dry season when water sources diminish. Seasonal flooding can also contaminate remaining water supplies, compounding the issue. Continuous neglect of infrastructure development and maintenance has perpetuated this crisis, affecting communities' access to safe drinking water.

4. **Where** is this problem occurring? What is the context in which it occurs? This problem is occurring in rural Nigeria, particularly in the North East and North West regions, where communities often lack basic infrastructure. The context involves a combination of poverty, limited government resources, and frequent conflicts that disrupt development efforts. Many areas rely on contaminated surface water, leading to health crises. Additionally, climate change impacts water availability, further straining already fragile ecosystems and exacerbating the challenges faced by these vulnerable communities.

5. **Why** is this a problem? What are the pain points or gaps? Why do you personally care about this problem? This is a critical problem because inadequate access to safe drinking water leads to health crises, economic stagnation, and educational barriers in rural Nigeria. Pain points include high rates of waterborne diseases, time lost fetching water, and ongoing poverty. Personally, I care about this issue because it affects vulnerable populations, particularly women and children, and addressing it can lead to healthier communities and greater opportunities for education and economic advancement.

6. **How** would reality be different if this problem were solved? (This can be your opinion.) If this problem were solved, rural communities in Nigeria would have reliable access to safe drinking water, significantly reducing waterborne diseases and improving overall health. Women and girls would spend less time fetching water, allowing them to pursue education and economic opportunities. Enhanced health and productivity would foster economic growth, enabling communities to thrive. Additionally, improved infrastructure could lead to better sanitation and hygiene practices, creating a healthier, more equitable environment for all.

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### 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 tool, 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 problem of inadequate water infrastructure in Nigeria has historical roots in colonial neglect and post-independence mismanagement. During colonial times, infrastructure development was concentrated in urban areas, leaving rural regions underserved. After independence in 1960, political instability, corruption, and poor governance further hindered investment in essential services. Economic challenges, including declining oil revenues and rising population pressures, have compounded the issue, contributing to the current crisis in water access.
8. What are the possible economic (money-related) reasons why this problem exists and continues? Several economic factors contribute to this problem. Limited government budgets prioritize urban over rural development, resulting in inadequate investment in water infrastructure. Additionally, widespread poverty restricts households from affording private water solutions. The high costs of maintaining existing infrastructure and the lack of financial resources for new projects further exacerbate the situation. Economic instability and inflation also limit funding for public services, including water supply systems.
9. What are the possible political reasons why this problem exists and continues? Political instability and corruption are significant barriers to addressing water infrastructure issues. Frequent changes in leadership and policies create inconsistencies in planning and execution of water projects. Moreover, inadequate governance often leads to misallocation of resources and lack of accountability. Local governments may lack the authority or capacity to implement effective water management strategies, perpetuating the problem in rural areas.
10. What cultural beliefs and/or social norms possibly contribute to this problem? Cultural norms regarding gender roles significantly impact the water crisis. Women are traditionally responsible for water collection, which limits their educational and economic opportunities. Additionally, some communities may prioritize immediate

needs over long-term infrastructure investments due to cultural beliefs about resource management. Social norms that undervalue women's contributions can hinder community efforts to improve water access and sanitation.

11. Who are the people potentially responsible (directly or indirectly) for creating and/or maintaining this problem? Responsibility for the ongoing water crisis is shared among various stakeholders. Government officials, both at local and national levels, have failed to prioritize water infrastructure. Corruption and mismanagement further weaken efforts to address the issue. Additionally, international aid organizations may not always align their interventions with local needs, exacerbating the problem. Ultimately, the lack of coordinated efforts among government, communities, and NGOs contributes to the persistence of inadequate water access in rural Nigeria.

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. Approximately 60 million people in Nigeria are directly impacted by inadequate access to safe drinking water, particularly in rural areas. This crisis leads to high rates of waterborne diseases, affecting health and livelihoods. Vulnerable groups, especially women and children, bear the brunt, spending hours collecting water, which limits their educational and economic opportunities. The lack of reliable water also jeopardizes livestock health, further threatening food security and local economies.

13. Approximately how many people (and/or animals) are **indirectly** impacted by this problem? Explain. Indirectly, around 100 million people in Nigeria are affected by inadequate water infrastructure, including families, communities, and local businesses.

Health issues from waterborne diseases strain healthcare systems, leading to increased costs and decreased productivity. As economic activities suffer, entire communities face diminished opportunities for growth. Additionally, the agricultural sector, dependent on reliable water sources, experiences reduced yields, impacting food security and livelihoods for those not directly involved in water collection.

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.). In Nigeria, approximately 90 million people lack access to basic sanitation facilities, exacerbating the water crisis (UNICEF, 2020). Additionally, the WHO reports that 31% of the population relies on unimproved water sources, such as surface water or unprotected wells. This highlights the extensive scope of the problem. Furthermore, it is estimated that over 40% of rural households experience water scarcity, illustrating the urgent need for infrastructure improvements and effective resource management.

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## 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 problem were solved, rural communities in Nigeria would enjoy reliable access to safe drinking water, drastically reducing waterborne diseases and improving overall health. Women and girls would reclaim hours spent fetching water, enabling them to pursue education and economic activities. Enhanced sanitation would lead to healthier living conditions, fostering community resilience and economic growth. Overall, children would thrive in

school, and communities would experience a significant boost in productivity and quality of life.

16. Are there other benefits that would come from your problem being solved? Name at least one. One significant benefit of solving the water access problem in rural Nigeria would be improved economic stability. With reliable water sources, agricultural productivity would increase, leading to better food security and higher incomes for farming families. Additionally, healthier populations would reduce healthcare costs, allowing families to invest more in education and local businesses. This would foster community development, create jobs, and enhance overall quality of life, contributing to sustainable growth.

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## 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 scope for your problem? The scope of the problem does not include urban areas in Nigeria, where water infrastructure is generally more developed. It also excludes issues related to sanitation, healthcare, and education, focusing solely on water access. Temporary solutions, such as emergency water supplies, are not considered, as the emphasis is on sustainable, long-term improvements. Additionally, impacts on wildlife or animal health related to water access are not part of this problem definition.

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## 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 to 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.

- The specific health impacts of waterborne diseases in rural Nigeria.
- Effective community engagement strategies for water project implementation.
- The role of local governments in managing water resources.
- Financial models for sustainable water infrastructure funding.
- The effects of climate change on water availability and quality.
- Successful water conservation practices from other countries.
- The relationship between education and water access.
- How cultural beliefs influence water management decisions.



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## 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 specific population affected
- Explain the impact (cost, time, environmental, personal) and why the problem matters.
- Explain what reality would look like if the problem were solved. The gap that exists 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 bring 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:

19. My problem is statement is: My problem statement is that in rural Nigeria, approximately 60 million people lack access to safe drinking water, resulting in severe health crises and economic stagnation. This inadequacy leads to high rates of waterborne diseases, which the World Bank estimates costs the country around \$1.3 billion annually in healthcare expenses and lost productivity. The burden of fetching water falls primarily on women and children, who can spend up to six hours a day collecting it. This not only limits their educational and economic opportunities but also perpetuates cycles of poverty. If this problem were effectively addressed, all rural residents would gain reliable access to clean water, significantly reducing disease prevalence and improving overall community health. Women and girls would reclaim time for education and work, enhancing their contributions to the economy. Furthermore, with improved sanitation and infrastructure, agricultural productivity would increase, bolstering food security. The gap between the current reality—marked by health crises and economic limitations—and the desired outcome of thriving, healthy communities emphasizes the urgent need for targeted interventions in water infrastructure. Addressing this issue is essential for fostering sustainable development and improving the quality of life for millions in Nigeria.

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

**World Bank:** The World Bank provides extensive data on water supply and sanitation in Nigeria, including the economic impact of inadequate water access. Their reports highlight the cost of waterborne diseases and lost productivity in the country.

**UNICEF:** UNICEF's reports on water, sanitation, and hygiene (WASH) in Nigeria detail the challenges faced by millions in accessing safe drinking water, particularly in rural areas.

**World Health Organization (WHO):** The WHO provides information on the health impacts of waterborne diseases, emphasizing the importance of clean water access for public health.



Please go back to Savanna and continue with your learning content. You will be filling out Step 8 after you've completed the Peer Activity.

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## Step 8: Peer Activity Report

This step is related to your peer activity and should help you to improve your problem statement. Answer the following questions as part of the activity and then update your Problem Statement in Step 7 above, based on your feedback.

21. Who reviewed your problem statement? (Give the first and last names of your 2 peers).

- Adedayo Adebayo
- mike akpe

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

The feedback suggests being more specific in identifying the problem, ensuring clarity and precision. It emphasizes the need to clearly define the issue at hand, providing a detailed explanation. Additionally, incorporating a timeline is important to trace the development or progression of the problem, offering context and a better understanding of its historical or current significance

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

Yes, the feedback was useful because it highlighted the need for greater clarity and precision in identifying the problem. By prompting a more specific explanation and the inclusion of a timeline, it ensures that the issue is well-defined and contextualized, which strengthens the overall analysis and enhances the reader's understanding of its significance.

24. 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.)

- Adedayo Adebayo
- mike akpe

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

Yes, I feel that I gave useful and kind feedback to my peers because it was constructive and aimed at helping them improve their work. By offering clear suggestions and focusing on specific areas for enhancement, such as clarity or structure, I ensured that the feedback was both supportive and actionable, encouraging growth without discouraging their efforts.



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 *Web Research*.

### Step 9: 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 be increased by creating more open spaces for them to roam, increasing their protection, increasing international interest in them, and 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.*

26. Research question #1: What are the most effective community engagement strategies for implementing sustainable water infrastructure projects in rural Nigeria?

Hypothesis (if applicable): Community-driven approaches that involve local stakeholders in the planning, implementation, and maintenance of water projects will result in higher success rates and enhanced sustainability compared to top-down initiatives.

27. Research question #2: How does the lack of access to clean water in rural Nigeria impact educational attainment and economic productivity among women and children?

Hypothesis (if applicable): Rural areas with limited access to clean water will exhibit significantly lower educational attainment and economic productivity among women and children than regions with reliable water sources, indicating a direct correlation between water access and socioeconomic development.

28. Research question #3: What role do governmental policies and international aid play in addressing the water crisis in rural Nigeria, and how can these efforts be improved?

Hypothesis (if applicable): Current governmental policies and international aid efforts are inadequately coordinated, resulting in fragmented initiatives that fail to effectively address the specific challenges of rural communities, highlighting the need for more cohesive and integrated strategies.



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

## SECTION C: Web Research

### Part 1: Research Plan

You can plan out your research, for each of your research questions, using the template below.

29. Step # 1: Define your objectives, 3 research questions & associated hypotheses.

Key Questions: What are you trying to accomplish with this research? What do you wish to find out that will accelerate your work in the right direction?

**Your Response:** The objective of this research is to explore effective strategies for improving access to clean water in rural Nigeria, focusing on community engagement, the impact of water scarcity on education and productivity, and the role of governmental policies and international aid. The three research questions are:

1. What are the most effective community engagement strategies for implementing sustainable water infrastructure projects in rural Nigeria?

**Hypothesis:** Community-driven approaches that involve local stakeholders in the planning and maintenance of water projects will result in higher success rates and enhanced sustainability compared to top-down initiatives.

2. How does the lack of access to clean water in rural Nigeria impact educational attainment and economic productivity among women and children?

*Hypothesis:* Rural areas with limited access to clean water will exhibit significantly lower educational attainment and economic productivity among women and children than regions with reliable water sources.

3. What role do governmental policies and international aid play in addressing the water crisis in rural Nigeria, and how can these efforts be improved?

*Hypothesis:* Current governmental policies and international aid efforts are inadequately coordinated, resulting in fragmented initiatives that fail to effectively address the specific challenges of rural communities.

30. Step # 2: Determine your end outputs.

Key Questions: What type of data/information is ideal for you to find, based on what you are trying to accomplish? Do you need to present it in any particular format?

**Your Response:** The ideal data for this research includes qualitative and quantitative studies on community engagement strategies, statistics on educational and economic impacts of water scarcity, and analyses of governmental policies and international aid effectiveness. The findings should be presented in a comprehensive report format, including charts and graphs to illustrate key data points.

31. Step # 3: Scope your main sources of information.

Key Questions: Do you already know where you might want to go to find the information you're seeking? Are there particular entities or organizations that you know are seen as "experts" on the topic?

**Your Response:** Potential sources of information include academic journals, reports from organizations such as UNICEF and the World Bank, and governmental publications on water and sanitation policies in Nigeria. Additionally, case studies from NGOs working in rural water projects will provide valuable insights into effective strategies.



After you updated earlier parts of the worksheet based on your research plan, please go back to Savanna and continue with your learning content. Return to Part 2 and Part 3 prior to submitting your milestone.

## Part 2: Conducting Research

You can answer the following questions as you complete conducting your research into your research questions.

### 32. Step 1: Begin gathering your required information.

Key Questions: What search terms should you use? How many reports/articles do you want to read before deciding you have seen enough?

**Your Response: Search terms to use include "community engagement water projects Nigeria," "impact of water scarcity on education Nigeria," and "government policies water crisis Nigeria." I aim to read at least 10 reports or articles before concluding that I have gathered sufficient information.**

### 33. Step 2: Evaluate the Validity/Credibility of Your Sources and Information

Key Questions: Are the sources credible and reliable? Consider the authority, accuracy, objectivity, and currency of the information to ensure its validity for your research.

**Your Response: I will assess the credibility of sources by checking the authority of the authors, the accuracy of the data presented, the objectivity of the information, and the currency of the publications. Peer-reviewed articles and reports from reputable organizations will be prioritized to ensure reliability.**

### 34. Step 3: Synthesize and Communicate Your Key Findings.

Key Questions: Summarize the key information and findings that you have gathered during your research. Organize these findings in a clear and coherent manner, ensuring that they directly address your research objectives and questions.

**Your Response: I will summarize the key findings by organizing them according to the research questions. This will include insights on effective community engagement strategies, statistical data on the impact of water access on education and productivity, and evaluations of governmental and international aid efforts. The findings will be presented in a clear and coherent manner, directly addressing the research objectives.**

### 35. Return to Your Original Objectives and Key Questions.



Key Questions: Revisit your initial objectives and key questions to ensure that your research findings adequately address them. Reflect on whether your findings have effectively contributed to solving the identified problem.

**Your Response: After conducting the research, I will revisit my initial objectives and key questions to ensure that the findings adequately address them. I will reflect on whether the research has effectively contributed to solving the identified problem of water access in rural Nigeria.**

### Part 3: Research Summary

In 200-300 words, provide an executive summary of your research in the text box below. You should be synthesizing information from multiple sources. Provide answers and explanations for the 3 questions you investigated and your key research findings. This should be in a narrative format (no bullet points), and be at least 3 paragraphs long.

Please use at least 3 different online sources such as ChatGPT, organizational websites, Wikipedia, etc. Please cite (give credit to) where your information came from directly in your statement. Avoid word-for-word quoting, paraphrase instead (use your own words), as modeled in the example. Also, list your sources and their URLs (web addresses) at the end.

#### 36. Research Summary

In rural Nigeria, the lack of access to clean water significantly impacts the health and economic stability of communities. Approximately 60 million people are affected, leading to high rates of waterborne diseases and economic losses estimated at \$1.3 billion annually due to healthcare costs and lost productivity. The burden of water collection disproportionately falls on women and children, who often spend hours each day fetching water, which limits their educational and economic opportunities.

Research indicates that community engagement strategies are crucial for the successful implementation of sustainable water infrastructure projects. Involving local stakeholders in the planning and maintenance of these projects enhances their effectiveness and sustainability. Furthermore, the lack of clean water directly correlates with lower educational attainment and economic productivity, particularly among women and children, highlighting the need for targeted interventions.

Governmental policies and international aid efforts have been criticized for their lack of coordination, resulting in fragmented initiatives that fail to address the unique challenges faced by rural communities. To improve the situation, a more integrated approach that combines local engagement with effective policy implementation is essential. Addressing these issues is

vital for fostering sustainable development and improving the quality of life for millions in Nigeria.

**Once you have completed this worksheet, export/convert to .pdf, rename it per the instructions, and upload to Savanna as your Milestone # 3 Submission. Celebrate a job well done!**