









How to fully engage youth in enhancing Fisheries and Aquaculture in Sub Saharan Africa.

By

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1<sup>st</sup> best award winner of the Global essay writing competition under Youth for fish programme on how to fully engage youth in enhancing Fisheries and Aquaculture development in Sub SaharanAfrica. This paper was presented at the International conference on Fisheries and Aquaculture development for Socio-economic growth in Malawi.

### Abstract.

In the past decades, communities were mainly involved in fisheries because natural water bodies had an abundance of fish and the few who practiced aquaculture often did so for leisure. Currently, natural water bodies are being depleted of their resources due to factors like over exploitation and climatic change. Aquaculture is playing the role of reducing fishing pressure and supplying nutritious fish protein alongside natural water bodies. However few youth today, are involved in fisheries and aquaculture because fisheries no longer provides sufficient employment opportunities and aquaculture practices are not well known. It is important for youth to engage in fisheries and aquaculture to ensure knowledge transfer across generations that will promote a sustainable supply of aquatic resources and their conservation. Some of the interventions that can promote youth engagement in fisheries and aquaculture include government support, sensitisations and the ability of youth in transforming challenges in this sector in to opportunities. In order to fully engage youth in enhancing fisheries and aquaculture it is important to identify the challenges that limit their participation in fisheries and aquaculture, address these challenges and identify opportunities in the sector that can enable them make a significant contribution. This write up contains information about some challenges that limit youth participation in fisheries and aquaculture, interventions that could solve these challenges and opportunities for youth especially in the aquaculture sector.

### 1.0 Introduction.

During my research work I noticed that the number of youth involved in aquaculture is very small. In the past, more emphasis was directed towards fisheries due to big employment opportunities and a large number of profits that were generated from a high abundance of fish in Natural water bodies. For example, in Uganda fish generates about 442 billion Ugandan shillings annually and over 100 million US dollars internationally and a same amount in regional exports (NaFIRRI, 2010). The fishery also employs 136,000 artisanal fishermen and over 700,000 people are involved along the production to consumption fish production chain. The number of fish stocks in natural water bodies has greatly declined and more emphasis is being directed towards aquaculture. However, the two sectors are interdependent and their issues should be addressed jointly because problems faced in one could affect the other. An example of this dependence includes the fisheries sector supplies fish meal which is a feed ingredient for aquaculture feed while aquaculture technologies can be used to restock the depleting natural water bodies with fish. Fisheries and aquaculture is responsible for providing valuable resources like fish which is a nutritious animal protein. Therefore, it is important for youth to get actively involved in this sector in order to promote knowledge transfer across generations to ensure the sustainable future supply of these resources in abundance. Furthermore, youth are passionate, creative and energetic and their involvement in fisheries and aquaculture can promote its development through fresh approaches. For example during the Ugandan fish farmergs symposium this year, some youths were able to share their innovations like fish sausage as a form of fish value addition.

### 1.1 Challenges inhibiting youth participation in fisheries and aquaculture.

The number of youth involved in fisheries and aquaculture is still small due to some of the following reasons:

*Lack of experience:* Majority of youth do not have practical experience in the sector. Youth that have more experience in fisheries and aquaculture have a positive attitude and make use of the opportunities it offers while less experienced youth have negative attitudes and are often outweighed by its challenges.

*Mindset:* Most youth prefer engaging in office jobs instead of field activities and yet fisheries and aquaculture is a highly practical field. For example fisheries graduates sometimes opt to change to other professions that involve less or no field work.

*Incentives:* Incentives of being employed on fish farms are often not motivational enough for youth to continue engaging in aquaculture. For example the wages or salaries are often small as compared to the amount of labour invested. Furthermore, working on fish farms rarely provides capacity building opportunities like further education for youth.

**Decline in fish catches:** Fish stocks in natural water bodies have declined resulting in a reduced number of employment opportunities for youth. As a result youth divert to sectors they feel will provide better income generating opportunities. 4

Alien practice: As compared to other agricultural sectors like crop and animal farming, aquaculture is a newer practice in Africa. For example in Uganda, fish farming was introduced in the 1950¢s as compared to crops that have been traditionally cultured for centuries in local communities.

*Input availability:* During my field work I discovered that two districts in Uganda did not have manufactured feed outlets for fish. This increased farmer¢s costs as they had to travel to distant districts in order to access quality feed. Youth are adventurous however they easily lose interest in business ventures that would involve difficulties in accessing inputs.

*Capital investment:* Initial capital investments in fisheries and aquaculture are high. For example in fisheries youth need to buy boats and fishing gear which are very expensive and in aquaculture costs of constructing culture systems like ponds are expensive. Most youth have limited income to carry out such big capital investments.

**Policies:** Most policy makers are not aware about the crucial role youth have to play in promoting the sustainable use and protection of aquatic resources across generations. Therefore, policies and schemes that support youth involvement especially in the aquatic sector are limited. In order for youth programmes in this sector to be successful, government support is very important.

# 1.2 Interventions that can aid in promoting youth involvement in fisheries and aquaculture.

The following are some of the interventions that could aid in promoting youth involvement in fisheries and aquaculture:

**Long term education:** Scholarships for long term studies in the aquatic field can be given to youth in order to increase the number of knowledgeable expertise in this field. This expertise ranges from fisheries extension workers, water quality monitors and fish feed formulators among others.

**Short trainings:** Trainings and demonstrations can be carried in order to equip youth with practical skills to carry out sustainable fishing or aquaculture practices. These can be organised at a communal level by help of local authorities or by institutions in form of field internships.

**Sharing experiences:** Testimonies of youth that have been successful in this field can be shared in forums, conferences and even documentaries in order to motivate other youth to join or continue engaging in the sector.

Awards and recognitions: These can be given to youth that have made outstanding contributions towards development of this sector at different levels for example community, institutional or regional levels. It will encourage other youth to actively contribute to fisheries and aquaculture development regardless of their locations and responsibilities. For example youth who have made efforts to promote sustainable fishing methods or those that have mobilised others to carry out good aquaculture practices in their communities.

Government policies: Governments should set policies and implement programmes that promote youth involvement in the fisheries and aquaculture sector. Some of the programmes can include youth sensitisations and free access to literature.

**Financial support and subsidies:** Special grants or loans can be provided for youth that want to develop their business establishments in this field. They can also be provided with inputs and materials at a subsidised price. Items were subsidies could be offered include fishing boats, fishing gear plus fish feed and seed.

**Adoptable technologies:** During trainings and sensitisation of youth, easily adoptable and accessible technologies should be used for demonstration. For example in remote areas where access to plastic for use as outlet and inlet pipes may be in accessible youth can be showed how to use bamboo as pipes. This ensures that the knowledge being passed on will easily be applied.

**Networking:** Youth engaged in this field should be networked so that they can share their experiences and try to suggest challenges to problems they face in this field. These networks can be formed through forums, conferences or symposiums organised for youth. **Research:** Special grants should be set aside to carry out research and generate programmes that can increase youth participation in sustainable fisheries and aquaculture practices. However these programmes will need to involve youth during the planning process so that they are applicable and have a positive outcome.

### 1.3 Opportunities for youth in aquaculture.

The best way of engaging youth in fisheries and aquaculture to identify opportunities in the sector that can enable them make a significant contribution towards its development. This will enable them look beyond the challenges that inhibit their participation and focus more on the future benefits of obtaining practical knowledge through internships in the aquatic sector. Such field experiences will provide youths with skills that can enable them not only secure a future of self employment but also significantly contribute towards fisheries and aquaculture development. Currently, more emphasis lies in the aquaculture sector since its practice reduces pressure on the already depleting fisheries resources. Therefore, the following are some of the possible opportunities for youth in aquaculture and their roles in contributing towards its development. These opportunities were obtained by identifying some of the challenges of the fish farmers I interacted with during my field research in the Eastern, Central and Western districts and they are as follows:

**Farm input suppliers:** there is a high demand especially for fish feed and seed from fish farmers. Youth can generate income by supplying some of these inputs to farmers that cannot easily access them.

**Service providers:** youth that have practical aquaculture knowledge can take the opportunity of obtaining an income by providing technical advice to practicing or prospective fish farmers. 6

**Feed factory suppliers:** the demand for fish feed is high regardless of its increasing prise. Therefore, feed meal factories need a constant supply of fish feed ingredients in order to meet this demand. Youth can either engage in agriculture or act as middlemen in order to obtain an income from supplying feed meals with fish feed ingredients some of which include maize, soy bean, cotton seeds and silver fish among others.

**Farmer mobilisers:** Youth are energetic and can easily play the role of mobilising fish farmers in to groups especially those located in remote areas where access to aquaculture facilities is a problem. Groups enable farmers cut some production costs like feed and in the process enable youth obtain respect and social status in the community. These youth could easily be voted in leadership positions in these societies.

**Fish farmers:** fish has a high market which makes aquaculture a profitable venture. Youth engagement in fish farming will create a source of income and also supply nutritious animal protein not only to their homesteads but communities. However, they will have to be in possession of practical aquaculture knowledge or access good technical advice in order to prevent farm production losses

Fish processors: Very few farmers practice value addition of fish products probably because they dongt have knowledge of how to do it or they cannot afford its costs. This shows that many farmers incur post harvest losses from selling mainly fresh fish. Youth can mobilise funds and set up cooling facilities in their communities which can act as central storage points for farmers that have not been able to sell all their fish. This will enable youth generate an income and also help in reducing post harvest fish losses in their communities.

*Market links:* Several youth are exposed to modern computer technologies. They can generate income by using these technologies to designing programmes that can easily link farmers to highly profitable markets.

*Writers:* Youth can engage in writing aquaculture manuals, articles and fundable proposals. This aids in information sharing and enables youth to link to valuable professional networks.

### 2.0 Conclusion

It is possible to engage youth in development of fisheries and aquaculture through sensitisations, government interventions and community support. However, I believe that it is our responsibility as youth to take the first step in steering this engagement by actively focusing on how we can make use of the opportunities the fisheries and aquaculture sector has to offer. I am confident that by sharing our passion for development of fisheries and aquaculture through meaningful networking we can achieve this goal even at a regional level. The National Conference on Fisheries and Aquaculture in Malawi is a good move in involving youth in actively addressing challenges limiting their participation in fisheries and aquaculture development. It will be an honour to be a part of this conference because it will provide a platform of information exchange among expertise of different nations that will aid in promoting development of fisheries and aquaculture regionally.

# 3.0 References.

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