

Strategies to ensure the sustainability of environmental education programmes as a contribution to the GSPC

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Introduction

FSNGB E.E Unit believed in inclusivity of other relevant Environmental Organizations like, Free State Department of education, Dep. of Water and Forestry (DWAF), Dep. of Environmental Affairs and Tourism (DEAT), District and Local Municipalities, Bloemwater, Working for Water, NGO's like 2020 Vision, etc in order to promote an understanding of the holistic nature of the environment and to also have interdisciplinary and integrated approach so that our E.E Programmes link to and support e.g. the formal school curriculum, Intergrated Development Programmes (IDP's) of the municipalities. For all our introduction of our programmes to all stakeholders I have mentioned, we ensured that we meet with high-ranking officials of each department like Premier of the Free State, Minister of Executive Council of education in Free State, Provincial Chief Directors and Directors. Meeting and planning with people of this high official status, helped us to promote and sustain our programmes when looking at the influence and political powers they have especially in financial matters and decision making to assist promoting of our ideas. It was a blessing for FSNBG E.E Unit to meet with these powerful, influential departmental officials. This relationship resulted in the M.E.C of Education been the one who encourages school principals, teachers and learners to join FSNBG E.E Unit programmes, and this action by the M.E.C supports my comment I made earlier that, such powerful voices enhances the long-term sustainability of the project because we are been contacted by schools that we have not yet met and when we ask them how did they know about us, they responded by saying that the M.E.C of education advised them to meet with us.

Our second move then, is educating the educators and learners as an effective way of motivating teachers and enthuse learners before they even visit a Botanical Garden. Same approach of relating to high municipal officials is used before educating communities, like youth, adults, disabled and old citizens especially unemployed one's where we assist them with job creation component in our Greening of the Nation Programme which I will explain later in my presentation.

The following E.E Programmes at FSNBG E.E Unit are trying to address gaps identified in environmental education and awareness campaign.

1) Garden based environmental education programme

FSNGB E.E Unit aims and objectives are linked to the school curriculum, and lend themselves to a diversity of teaching topics and new opportunities for teachers for they become glad to have a new source of expertise to draw upon. Having a wide range of school topics, familiar topics such as flowers, seeds and fruits, leaves, adaptation, classification, growth etc, can be linked to ideas of biodiversity and its maintenance, both in the natural environment and the garden itself. Few learners we transported to the garden to give out this programme resulted in very high rapid increase of schools as they raised funds for transport just to get our programmes. We had to source funds from sponsors just to increase our staff to meet with the increasing demands from these schools. In this programme our team takes the role of the teacher during a school visit. We not only empower learners in this programme but teachers also get knowledge and skills which benefits also their school garden and the environment itself and more importantly, assisting both teachers and learners on variety of school projects encouraged by the Outcomes Based Education (OBE) to support their teaching and learning

programmes. This environmental knowledge and provision of teacher training and school involvement gives us the vital role we had to play within our local and school community. For us to have a long lasting influence, we targeted teachers from foundation phase to high school level, tertiary level and learners from special schools. Last year, we started introducing this programme to 120 Free State University of Technology students of biological sciences and a partnership was also formed with the University of Free State (Department of biological Sciences) where FSNBG E.E Unit gave basic A.E O (Assistant Education Officer) training to prepare these group of students to volunteer as A.EO's as part of free community service the university is expecting them to give. After they qualify as A.EO's, they will also be visiting local communities to enhance sustainability of our Environmental Education Programmes. It is also in this way where FSNBG E.E Unit is creating a pool of enthusiastic environmentalist to reach large number of target audiences.

2) Outreach greening programme

This programme focuses on taking the botanical gardens to schools where learners are educated on the development of indigenous water-wise gardens that are intended to promote the conservation of threatened, endangered, extinct, and endemic plant species. As some schools may never be able to visit a Botanical Garden, sadly due to lack of funds, a factor which is the biggest impediment to a school visiting a Botanical Garden, and hence such a visit to schools by FSNBG E.E Unit as we believe that school learners are conservators of the future. The quality and the impact of this programme has also influenced us to look for more funding to increase our Outreach Greening team to be able to meet with the increasing demands of schools who have not yet been accommodated in the programme. These demands from other schools is influenced by the visible changes in environmental surroundings of the schools who are part of the programme and their environmental knowledge and ethics, environmental awareness and modification of their behaviors towards the environment shown by learners in environmental clubs of those schools. Schools in this programme ultimately develop their own water-wise indigenous garden which they use as a learning tool/resource to support teaching and learning. Regular visits, support and monitoring of these schools by our Outreach Greening team ensures that the school works closely with its surrounding community by also workshoping and assisting them in the development of water-wise indigenous community garden. To ensure that we don't interfere with the school teaching time, we conduct these workshops just after school hours for about one and half to two hours and supply basic meals for teachers and learners who are attending those workshops. This is the programme that also helps to support schools that got funding from the M.E.C of Education in their "Beautification of schools Project" for ensuring that they develop water-wise indigenous school gardens

3) Greening of the Nation Programme

This is another Outreach Greening Programme where botanical Gardens are taken to communities with a job creation component, food security through fruit and vegetable gardens development and training and capacity building to ensure sustainability of the programme and to create permanent job and training opportunities for local unemployed and semi-literate communities. Urban and rural greening was promoted with the believe that they will contribute significantly to making cities, towns and settlements more livable and as an essential component for healthy and sustainable areas. Unemployed youth and few old age people were employed, workshoped with basic horticultural skills and empowered with environmental knowledge with the believe of building civic pride, community spirit and reduce crime by ensuring that they get non-accredited and accredited training in skills that will make them self-employed and job marketable. Creation of SMME's also forms the basis of this programme. This greening project has been incorporated into the IDP's with specific attempt to restore indigenous vegetation in schools, community areas and other public spaces. Few of the projects are community park of an "A" class, planting street trees, greening dumping sites together with the local community, developing school water-wise indigenous gardens, development of food vegetable gardens to nursery schools and developing community nursery that will act as reserve for threatened, endangered and endemic plant and tree species and can also be used by the community to support and strengthen their greening initiatives. This

programme addresses Extended Public Works Programme (EPWP) and Poverty Relief requirements, which promotes ownership by the people from areas of operation of the project. According to the evaluation of this project, it has raised awareness of South Africa's urban greening initiatives, encouraged communities to participate in various greening activities within their own surroundings. Poverty-stricken communities and presidential or nodal areas were mostly targeted to relieve poverty in these areas. Youth employed in this programme has also been registered to tertiary institutions to study environmental education and conservation courses, labourers have been given accredited and non accredited courses like HIV and AIDS, Life skills, Financial management, landscaping, horticulture, paving and concrete slabs making, Agricultural training etc.

4) Teacher professional development programme

Running teacher training workshops plays an important role in increasing the teacher knowledge of the environment to heighten their awareness of their school garden as an educational resource. Teachers are also encouraged to bring their learners to the Botanical Garden to conduct their lessons in a real practical situation. This programme also helps in sustainability of the school garden developed as they are empowered on how to use their school-developed gardens as a teaching resource. We further empower these teachers by identifying relevant environmental courses and registering them with tertiary institutions like Rhodes University were the first group of ten teachers successfully completed an Advance Certificate in Environmental Education (ACEE) course and are now been used in assisting FSNBG E.E Unit in educating schools and communities, and the second group is currently studying with Rhodes university. Because of the strong bond we had with the department of education, we also empowered one of the school curriculum developers with Rhodes University to undergo environmental tutor training and currently we use her as a tutor for educators doing ACEE with Rhodes University and she is now also training other Free State Provincial curriculum developers in the integration of learning areas and linking the school curriculum in environmental education .On the 01/02/2007 our partnership with the department of education was further cemented after our agreement with the Free State Provincial Department of Education Resource Centre which also serve as an In-service training for teachers, and we will be exchanging learning resources with them as per needs of the programme,we will be allowing them to conduct their In-service training at the botanical garden as the needs arise and visa versa. Same partnership was also formed with provincial Museum department of education and communication.

Conclusion

It has been proven beyond any reasonable doubt that, building and maintaining partnership with other stakeholders, engagement and inclusivity, sharing of resources and information, creating an environment of non-competence with them, all these results in avoidance of duplication of programmes, use of resources sparingly and ensures spread of environmental education programmes and avoidance of confusion to schools and as a result this leads to sustainability of our environmental education programmes and to plant conservation. Alone we can never win this battle, so lets work together to save our beautiful natural environment for the future generation.