

Global Astronomy Survey : Tanzania

First Submission: Noorali Jiwaji (SpoC) [see human resources section] 23 March 2008

SpoC Approved : Yes

1. Professional (Research) Astronomy:

(i) Number of universities offering Astronomy (and their names)

- Astronomy course, "Relativity and Cosmology" currently offered as part of Physics course at the University of Dar es Salaam.

- An option course "Concepts in Astronomy and Astrophysics" at the same University exists but not offered currently.

(ii) Number of universities offering Physics (and their names)

Three – University of Dar es Salaam (www.udsm.ac.tz), The Open University of Tanzania (www.out.ac.tz), and Sokoine University of Agriculture (www.suanet.ac.tz)

(iii) Number of academics who have been trained in Astronomy (ideally with their names and levels of qualification)

Two

1) Dr Noorali T Jiwaji. Ph.D – Physics, University of Dar es Salaam, 1990, and ISYA, Univ of Nigeria, Nsukka, 1979)

2) Dr Geoffrey Karigula – Ph. D – Solar Physics, University of Belgium, 19.....??

(iv) Number of astronomical facilities (observatories, telescopes, etc) and as much detail about each as possible (websites/contact details)

No Observatories, Couple of small telescopes

(v) Self evaluation (according to the different phases above, how would you rate your country in terms of Professional Astronomy? Please include any other relevant information to motivate your choice.)

“Phase 3”

Astronomy teaching in Tanzania is not coordinated and is taught as part of other subjects

2. Public Understanding of Astronomy:

(i) What governmental astronomy/science outreach programmes for the public take place (co-ordinated either by government departments or national facilities)

None

(ii) What non-governmental astronomy/science outreach programmes for the public take place (NGO activities or international programmes that your country is involved in)

1. Dr Jiwaji's monthly articles in Newspapers, Magazines and Websites

2. Stargazing activities organized in schools and public groups by Dr Jiwaji

3. Astronomy introduced by visiting programs, visiting teachers and student exchange programs
– For example: a) Hands on Universe activities, b) Exchange student

Parker Fagrelus from Dartmouth University who taught at Agape Secondary School in Moshi,
c) Mr Salaman teaching St John's University in Dodoma.

(iii) Comment on the presence of astronomy in the media (TV, radio, newspapers). Is it very prominent? Are there specific programmes on astronomy? Is the media generally willing to publish news on astronomy?

- No specific programs on TV or radio

- One Newspaper gives monthly astronomy articles by Dr Jiwaji

- One Tourist magazine gives tourist related monthly articles by Dr Jiwaji
- Astronomy events are often covered by the Media from foreign news prompts
- Specific local events are highlighted when given the information

(iv) Comment on the presence of astronomy/science in the general culture of the people. Are there any specific challenges or setbacks? Is astronomy a welcome subject of conversation?

- The Public is very much interested in astronomy and show enthusiasm when eclipses and other major events occur.
- A close connection is made between astronomy events and astrological significance.

(v) Self evaluation (according to the different phases above, how would you rate your country in terms of Public Understanding of Astronomy? Please include any other relevant information to motivate your choice.)

“Phase 2”

There is a great potential of harnessing public interest in astronomy to promote and increase science knowledge in the general population.

3. Astronomy in Schools:

(i) What governmental astronomy/science education and outreach programmes for schools take place (co-ordinated either by government departments or national facilities)

None

(ii) What non-governmental astronomy/science education and outreach programmes for schools

take place (NGO activities or international programmes that your country is involved in)

Occasional talks and stargazing activities in schools

(iii) Comment on the presence of astronomy in the school curriculum. Is it part of the school curriculum? Is it very prominent? What age groups?

1). The earth as part of solar system taught in Geography in relation to earth's climate in primary and secondary schools.

2). An Astronomy chapter in the third year secondary school physics syllabus.

(iv) Comment on the status of astronomy/science in schools. Are there any specific challenges or setbacks? Sufficient number of students studying maths and science? General interest in maths/science/astronomy in schools?

- Lack of teachers with training in astronomy

- Lack of equipment especially telescopes

(v) Self evaluation (according to the different phases above, how would you rate your country in terms of Astronomy in Schools?

“Phase 3”

Please include any other relevant information to motivate your choice.)

- To improve science teaching in schools it is necessary to sustain teacher interest in Astronomy to exploit the natural inquisitiveness of students.

- The Galileo Teacher Training program can go a long way towards achieving this sustainability.

Any other general comments or information that you feel would be useful for this survey?

- In Tanzania we need the support of the Government to recognize the importance of Astronomy in basic science teaching and learning

- But we also need the support of the international Astronomy community to support that effort with concrete materials (telescopes, books, planetariums, teaching materials etc.)

- We need at least 100 telescopes that can be distributed 4 each, 2 in primary schools and 2 in secondary schools in each of the 25 regions in Tanzania.

- A research level observatory also needs to be established and a proposal is to be made.

Website: <http://astronomy.in.tanzania.googlepages.com/home>