ASTRONOMY FOR DEVELOPMENT: PATH TO GLOBAL IMPACT

R. Venugopal¹, K. Govender¹, and E. Grant¹

The IAU established its Office of Astronomy for Development in 2011 in Cape Town, South Africa, in partnership with the South African National Research Foundation, and hosted at the South African Astronomical Observatory. The primary purpose of the office has been to implement the IAU's decadal strategic plan which aims to use astronomy to stimulate education and development globally. Since its inception there have been nine regional offices established, including one in the Latin American region which focuses on Andean countries. Following a very positive external review in 2015, as well as a supportive resolution by the 2015 IAU General Assembly to continue the work of the office, the OAD is now in a position to move beyond the setting up of structures to a more intensive effort aimed at measuring and delivering programmes with broader global impact.

Astronomy as a field is unique because it not only links to science and technology but is also deeply rooted in our cultures and history. The inspirational aspects of Astronomy, the common heritage of the sky, its cultural and historical significance, in addition to the developments in technology such as optics, computing, electronics and its contributions to numerous fields from Mathematics, Physics, Biology, and Chemistry place Astronomy in a privileaged position. Based on the ideas outlined in the IAU Strategic Plan, the Office of Astronomy for Development (OAD) aims to use Astronomy as a tool to drive sustainable development globally. The OAD's broad objectives are based on the 17 Sustainable Development Goals (SDG) of the United Nations.

The OAD team, located at its office in Cape Town, are ably supported by a number of people across the world in achieving its goals, including the OAD Steering Committee, the Task Force members, Regional Offices, volunteers, partners, collaborators. There are nine Regional Offices (either language regions or geographic regions) catering to various parts of the world that share the vision of the OAD. The Steering Committe guide the OAD and its network while the Task Forces provide their expert advice on various technical matters.

The primary method of implementation of the IAU Strategic Plan is through the projects annually funded by the OAD. Each year, the OAD invites applications for projects that address one or more challenges related to the SDGs by using Astronomy. Applications can be submitted by anyone from anywhere in the world. Selected projects receive funding to implement their ideas. To date, the OAD has funded close to a 100 projects around the world.

Projects are classified according to their target audience and funded under three Task Forces: Task Force 1 for Universities and Research, Task Force 2 for Childrend and Schools and Task Force 3 for the Public. The Latin American region has been a strong supporter and enabler of Astronomy for Development. A total of 99 applications have been received over 5 years from Latin America and Caribbean with 23 of those funded by the OAD (the overall funding rate is about 14% in comparison). Countries from the region also make up 5 of the top 10 with the most number of funded projects.

With the award of the prestigious Edinburgh medal to OAD Director Kevin Govender and the IAU for the creation of the office and the highly positive response from an external review in 2015, the OAD has received a lot of praise from all quarters. But the question on the real impact of OAD projects and other activities remains unanswered. The OAD Impact Cycle was designed to identify best practices and create a positive feedback loop that would optimize and improve projects based on research evidence, thereby showing what works and what doesn't, thus allocating resources efficiently. The Impact Cycle includes a rigorous and independent evaluation of the measure of implementation and impact of a project that would add to the body of evidence. All the resources from the project including evaluation and evidence form part of the common knowledge base that would inform a wide range of stakeholders in education, STEM outreach, and development agencies.

REFERENCES

International Astronomical Union, Astronomy for Development, Strategic Plan 2010-2020

¹IAU Office of Astronomy for Development, South African Astronomical Observatory, Cape Town, South Africa (rv@astro4dev.org).