

# Attempts to bring trained teachers in the schools of Nepal

**Jeevan Lamsal,<sup>1,2</sup>**

- 1. Pokhara Astronomical Society (PAS)**
- 2. Tribhuvan University, Nepal**



# Nepal

South Asian country situated between China and India.

Population of 28.51 million and area 147,181 sq. km.

Home to eight of the world's ten tallest mountains, including Mount Everest (8848 m), the highest point on Earth.



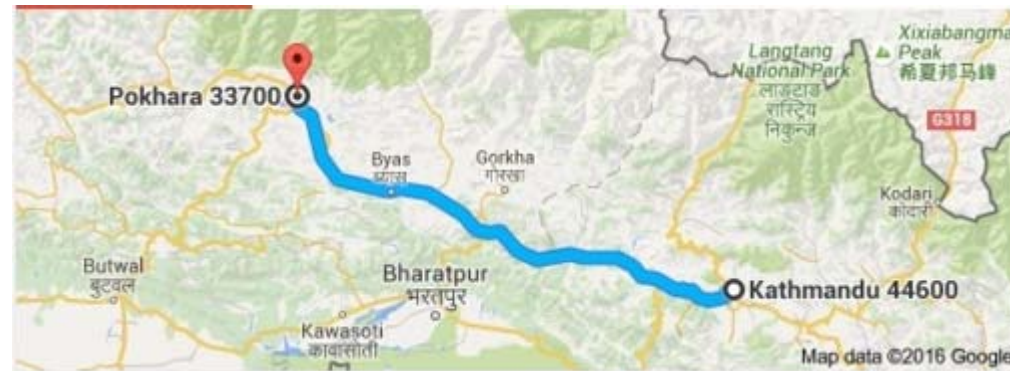
## Pokhara

Recently upgraded to the Metropolitan City.

Largest Metropolis zone by area

Population: 414,141

Gateway to the world famous Annapurna Trail and many other trekking routes



# INSTITUTIONS AND ORGANIZATIONS



Astronomy is included in the science book in lower secondary (grades 6, 7 and 8) and secondary level (grades 9 and 10) which consists only 10% of the total course and 5% in higher secondary level (grades 11 and 12).



Tribhuvan University  
Eight Colleges through out the country  
where Astrophysics  
is being taught in Master' s level as an  
elective and Space Science in Bachelor level  
education.



Government of Nepal has established B.P. Koirala Memorial Planetarium, Observatory and Science Museum Development board in 1992 in order to establish Planetarium and Science Museum in Nepal.



# PROFESSIONAL AND AMATEUR CLUBS



- Nepal Astronomical Society (NASO)
- Pokhara Astronomical Society (PAS)
- Dang Astronomical Society (DAS)
- Everest Science Center Nepal
- Astrophysics & Cosmology Research Group of Nepal
- Nepali Association for Astronomical Mission (NAAM)
- National Academy of Geo and Space Science
- Etc.



# STRUCTURE OF EDUCATION



Primary Education (Grade 1-5)

Lower Secondary Education  
(Grade 6-8)

Secondary Education (Grade  
9-10)

Higher Secondary Education  
(Grade 11-12)

University Education

Until 2016

Primary Education (Grade 1-5)

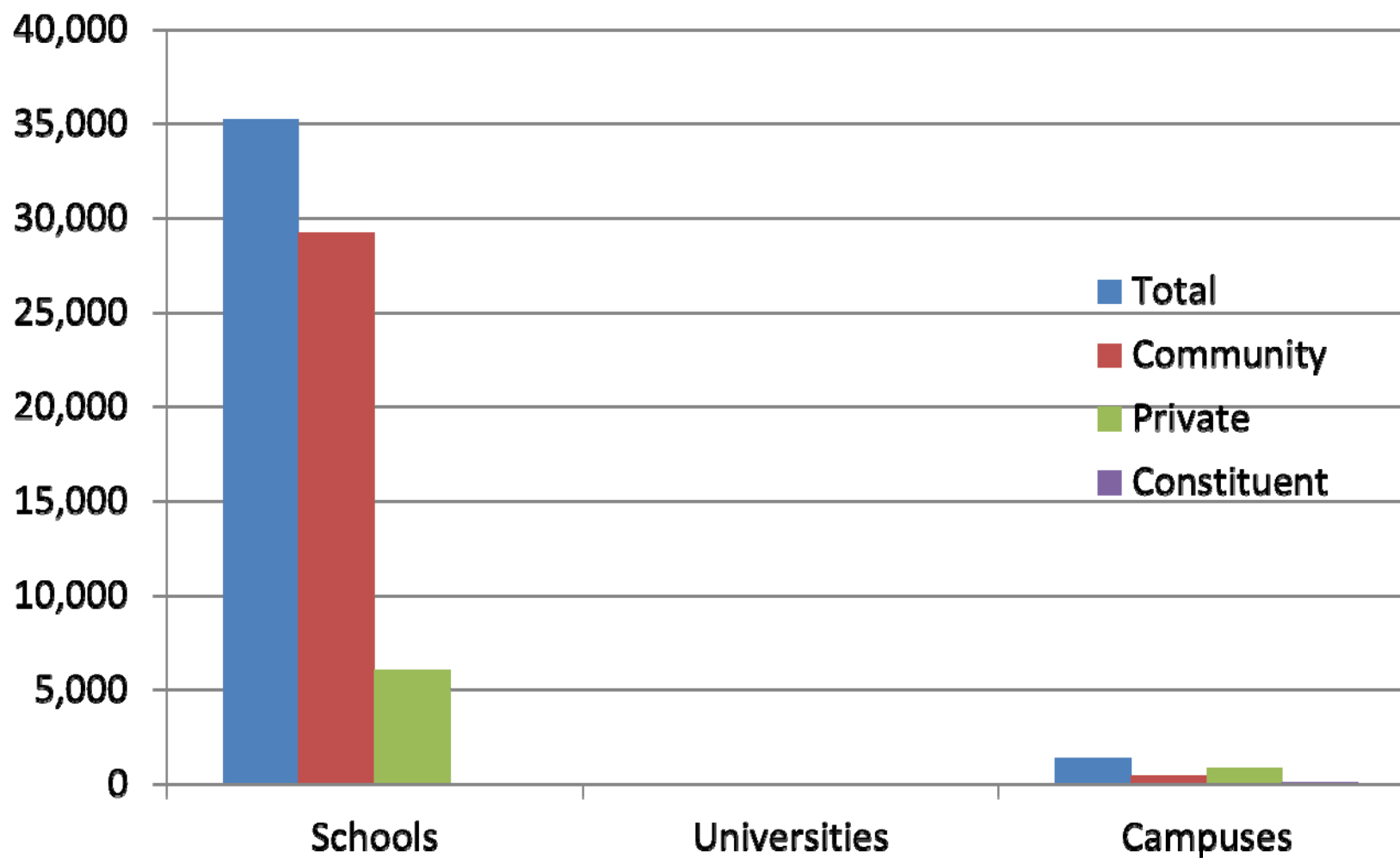
Lower Secondary Education  
(Grade 6-8)

Secondary Education (Grade 9-  
12)

University Education

Since 2016

# DATA AND FIGURE (Number of Schools)



Source: DOE, 2016  
and UGC, 2016

## Things we have

- One 90 mm MEADE telescope
- One green laser pointer pen
- Approximately 30 Solar Glasses
- About 15-20 display pictures





# OUTREACH PROGRAMS



- Star Parties
- Presentation/Talk Program
- AstroPhoto Exhibition
- PAS Astronomy Class
- Webinars
- Information sharing in social media
- Teacher' s Training Program
- Workshops



# OUTREACH PROGRAMS



- Star Parties
- Presentation/Talk Program
- AstroPhoto Exhibition
- PAS Astronomy Class
- Webinars
- Information sharing in social media
- Teacher's Training Program
- Workshops



# OUTREACH PROGRAMS



## Galileo Teacher's Training Program:

- **GTTP 2012 – Kathmandu, organized by NASO**
- GTTP 2013 – Pokhara, organized by NASO
- GTTP 2014 – Pokhara, organized by PAS
- GTTP 2015 – Pokhara organized by NASO/PAS
- GTTP 2016 – Syangja, organized by PAS
- GTTP 2016 – Pokhara, organized by PAS

# TEACHER'S TRAINING PROGRAMS



## Galileo Teacher's Training Program:



# TEACHER'S TRAINING PROGRAMS



- Salsaj
- Sterallium Simulation
- Models of Constellations
- Solar System Models
- Black Hole Demonstration
- Night Sky Information



# TEACHER'S TRAINING PROGRAM



- Government training program
- Public training program
- Private schools training program
- Teacher associations training program
- Professional training program
- NGOs Training Programs



## Merits

- Awareness among students, teachers and public
- Generating interest among teachers to participate in training programs
- Effective way of teaching
- Outreach programs are helping to understand astronomy
- Number of students in STEM is increasing

## Limitations

- Lack of equipment/resources
- Less number of experts
- Low budget for astronomy education
- General teachers without the knowledge of astronomy and space science
- Less practical way of teaching-learning
- Problem of finance to organize teacher' s training program and workshops for teachers





THANK  
YOU

