*Policy Brief*

# Characteristics of Teachers Teaching Mathematics and Science

**This study analysed background, employment status, experience and perception of class VIII teachers in mathematics and science based on data from the National Achievement Survey (NAS) for Class VIII students conducted in 2012-13 and Upper Primary school teachers from the District Information System for Education (DISE) 2012-13.**

**It highlighted several policy implications for teacher workforce planning. The data analysis showed the importance of systematic planning in pre-service training of teachers and linking it with recruitment.**

## Key findings and policy implications

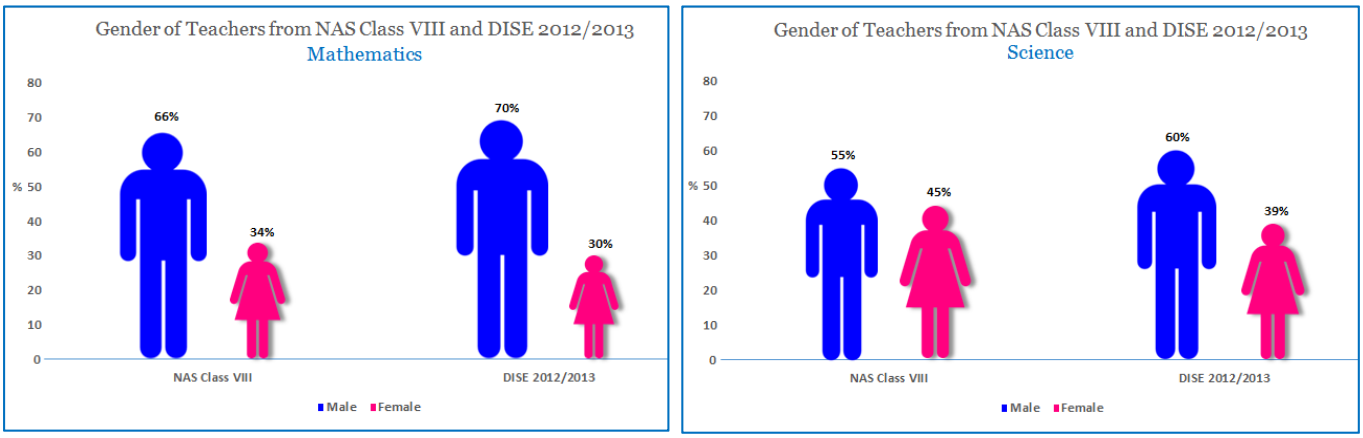
### Workforce Planning

- Age and gender trends should be taken into account while recruiting additional teachers
- Flexibility in recruitment norms to avoid teacher shortages including resulting from social category reservations.
- Need for teachers to work with employment stability in order to retain experienced teachers and promote secure learning environment for students.

### Gender

There was a gender imbalance among upper primary teachers, with male teachers comprising 57 per cent and female 43 per cent. This ratio remained about the same among the participating science teachers. However, the gender gap was wider in mathematics with one female teacher to every two male teachers (male 66 per cent, female 34 per cent).

**Figure 1: Gender of teachers in NAS Class VIII and DISE 2012/2013**



## Areas of further Research

Further research is required in the following areas in order to provide sound background for policy recommendations:

- in-depth analysis on gender imbalance among mathematics and science teachers linking with gender stereotype about the subjects and the role of teachers
- representation of reserved categories in teaching work force
- linking education qualification with teaching subject of teachers
- temporary appointment and employment stability in teaching profession