Genetically Modified Crops

**Why So Much?**

- **Ecological:** Invasive species, Upland cotton, etc.
- **Economic:** Inefficiency in seed purchase, lack of alternative seeds.
- **Social:** Social justice issues, economic dependency.

**S/M Crops in India**

- **Bt Brinjal:** Not released yet.
- **DMH-11:** Released in 2013.
- **New Developments:** US cotton, CRISPR Cas9.

**S/M Crops and Green Revolution**

- **Green Revolution:** Increased food production, productivity.
- **New Challenges:** Such as post-Green Revolution challenges like GM crops.
- **Issues:** Excessive use of chemicals, etc.

**Issues and Challenges with S/M Crops**

- **Persistence:** Persistence of Bt genes due to the lack of knowledge.
- **Data Sufficiency:** Data sufficiency regarding the impact of GM crops.
- **Transgene:** Transgene flow from GM crops to non-GM crops.
- **Allergy:** Allergy issues with GM crops.

**Way Forward**

- **Institutional Structure:** Need for strong institutional structure.
- **Patent Policy:** Need for a strong patent policy.
- **Data Collection:** Need for improved data collection.
- **Public Awareness:** Need for increased public awareness.