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Assessment of Pasture land degradation by Remote Sensing methods

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RESEARCH AREA

The research area comprehends the territory of the Farish district (Jizzakh region)



RESEARCH AREA

- Total area of the Farish district is about 480 thousand hectares including 75% of pasture land. Relief of the study area consists of a plain with steppe, highland, lowland, slopes and covered by semi desert vegetation and steppe vegetation
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Problems led to pasture degradation

- Increasing the level of underground water
 - Low precipitation
 - Wind erosion
 - Overgrazing and non-systematic grazing of livestock
 - Increasing the livestock numbers
 - Cutting of shrubs
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IMPORTANCE of the RESEARCH

Responsible organization for pasture land monitoring or assessment is Landgeodezkadastr state committee which still uses traditional methods of assessment. The traditional method is mainly performed by field checking that requires much time, big amount of financial and human resources. Due to these factors State committee can not provide up to date information about the total pasture land of the country.

That's why remote sensing methods should be applied for this study area and other pasture lands of the republic which is time and cost effective.

Specific objectives of the RESEARCH

- Analyze the current situation of study area
 - Analyze more convenience Remote Sensing method for assessing the pasture land degradation
 - Zoning of degraded areas by percentage of degradation level
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SCHEME OF ACTIONS

Satellite image

Atmospheric and Geometric Correction,
Georeferencing

Application of
NDVI

Application of
SAVI

Comparison of results and select the
most suitable

Zoning of the degraded areas for
further improvement



EXPECTED RESULTS

Cost, time and workforce effective method will be determined which can be applied for this area

GIS map will be developed for further use and updates

Zoned areas by degradation level will be created for further improvement measurements and rotational pasture use

THE PASTURE LAND OF THE STUDY AREA



Thank you for attention !

