INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT

SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805 eISSN :2394-6334 https://www.ijmrd.in/index.php/imjrd Volume 11, issue 09 (2024)

ROLE OF REMOTE SENSING IN AGRICULTURE IN UZBEKISTAN

N.F.Avilova

TIQXMMI MTU Opposite irrigation and agricultural technologies institute assistant Z. Rasulova

TIQXMMI MTU Opposite irrigation and agricultural technologies 4rd stage student of the institute.

Abstract: This article describes the role of remote sensing in human life. Remote sensing plays an important role in the production of agricultural products that will be needed throughout human life. It consists of monitoring the productivity of agricultural crops, studying the development process, giving fertilizers and medicines, and monitoring the correctness of the growing season.

Key words: remote sensing, vegetation, agriculture, productivity, monitoring, aerial photography, visual image, farm.

Last in years the earth from a distance probing village farm field with one in line forestry, geology, hydrology and many areas cover received Earth from a distance of zoning development geoinformation of technologies fast development and spreading with organic depends Earth from a distance probing and geoinformation of technologies together application space cartography, city department, forest and village economy, water economy, oil and gas digging get and transport infrastructure objects inventory to do and monitoring transfer, the environment evaluation problems solution to do for information source as active is used.

Village farm developed and developing of states in the economy main role plays Village farm economic from the side strong of countries strong work release tool or backward and a lot to the population have of countries to live is a tool, it is almost all of nations in the economy very big role plays Food products work release everyone for important important have and food products economic thrift with work release each one farmer, farmers association chairman and village economy agencies is the purpose. Farmer of the farm efficiency and product about knowledge and information have to be farming of activity is a strategy. [7,177-b; 8,199-200 –b]

From a distance probing technology of crops health , parasites spread of damage reproduction , productivity possibilities and soil conditions help in identification gives Product brokers are also farmers work release products with is interested because of the product quality and quantity all of the product the world in the market the price evaluates .

Artificial companion images and aerial photographs crops classification, their health and validity check and farming in monitoring the activity mapping weapon as is used. Village in the farm from a distance probing the following things done in raising used:

- plant types to classify;
- plant situation assessment;
- plant the harvest assessment;
- soil features mapping;
- t lands manage practices mapping;
 - compliance monitoring (farmer farm in their works). [7, 177-b; 8, 200 b]

Crop types to determine and mapping one row reasons according to important Crop of types maps national and a lot nationality village farm agencies, insurance companies and territorial village economy enterprises by is processed. This is from work goal that is known land in the field which at the time how plant type of cultivation the list organize from doing consists of.[5, 237-b; 7, p. 178; 8, 200-201-b] And this own in turn the harvest forecast to do and alternately to plant to the road put, soil productivity mapping of crops damage effect doer factors

INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT

SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805 eISSN :2394-6334 https://www.ijmrd.in/index.php/imjrd Volume 11, issue 09 (2024)

determination of crops drought or strong precipitation because of saw damage evaluation and farming in monitoring their activities is used . [5, p. 237; 8, p. 200]

Crop type to determine and fields limitation main task is considered This information to get traditional methods with information collection and on the ground observation is considered With that one in line from a distance probing dimensions standardization in order to one how many countries is located to agencies common information collect and information separate get strategies with provides.

From a distance probing plant type and area mapping for demand to be done information in collection the most efficient and reliable tool is considered From a distance probing floor area of the earth small in the image appearance and of vegetation health about information with provides. Planted of plants growth, types and their health change with their spectral reversibility also changes and change result a lot spectral sensors using is measured and observed. Radar of plants structure and contained humidity to determine and feel ability have With that one in line it is optical information for useful information with provides. It's both kind of in sensors information combine each one of the sensor intended classes and signatures separate get opportunity increases , therefore for also in it more clearly classification done increase opportunity it is considered quite high . [2, p. 479; 7, p. 201; 8, p. 179]

Crop types to determine and in mapping multi-period from images used in classification of the plant growth during his of reversibility change account is taken. This is it in turn growth in season repeated to the image get for calibrated sensors demand does .

Planted of crops health and their damaged to determine village of the farm productivity in raising incomparable place occupies. Water deficiency, insects, fungi, pests such as crops productivity reducing factors own in time to be determined it's necessary, that's it processes only when detected farmers pending from harm informed being his prevention take can. This is the process from a distance probing images often, at least weekly data with supply demand does. From a distance probing to farmers in the field in crops face giving problems to determine and this crops necessary nutrients with provide opportunity creates. This is the method with not only of farmers in crops perhaps of the earth also increases productivity and financial to thrift achieves and surroundings to the environment was negative effects reduces.[2, 480-b; 5, 238-b; 7, p. 201; 8, p. 179]

Village economy products pricing and sell with engaged in and to the field one step by step did not press entrepreneurs many organize is enough To them while the world across of products health about information need and this received data based on to the product price determine and trade contracts is made. These are entrepreneurs most of them to grow comparison for the harvest evaluation index or years during from productivity is used and that's it through which of the state village farm where level good that will determine. Like this from the data in the future face to give possible was problems solution in reaching used. [7, 202-b; 8, p. 182]

From a distance probing through one in the field is located in crops variable also monitor growth can Healthy plant fields one different in light color looks damaged crops while healthy to crops relatively darker in color it seems If the information if geolinked and we have a GPS device If so, we are local coordinate with image coordinate adapting problem there is was place very fast to determine can. [7, p. 202; 8, p. 182]

To crops delivered damage and crops health monitoring high to opportunity have was a lot spectral images demand does Images farmers for useful by doing of creation from the factors one crops about information from getting information until delivery was of time speed with depends. Crops two condition after a week reflection made images if taken this

INTERNATIONAL MULTIDISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT

SJIF 2019: 5.222 2020: 5.552 2021: 5.637 2022:5.479 2023:6.563 2024: 7,805 elSSN :2394-6334 https://www.ijmrd.in/index.php/imjrd Volume 11, issue 09 (2024)

information seen of harm own in time prevention in getting help give ca n't That 's why crops growth in the season known time during often received images demand does.

From a distance probing farmers by in the field completed monitoring information the place press can't, but he farmers urgent attention need was to places direct takes [p. 8,182]

Summary instead from a distance probe only village to the farm not but another It is integral to the fields as well dependence and village in the farm being cultivated of products quality and productivity effect shows. Crops development observation and study with one in line village farm cards also wide in creation scale is used. Aerospace pictures and unmanned to fly from the devices take from pictures using cards update, village farm from their lands reasonable to use to the road put, land make up their work right done in raising applied is coming.

Used literature :

1. Cracknell, AP and Hayes, L. (2007): Introduction to Remote Sensing, CRC Press.

2. Campbell, JB (2007): Introduction to Remote Sensing, Taylor & Francis.

3. B. Bhata (2008): Remote Sensing and GIS, Oxford University Press.

4. Mather, PM (2004): Computer Processing of Remotely-Sensed Images: An Introduction (3rd Edition), Wiley.

5. Thomas M. Lillesand, Ralph W. Kiefer, Jonathan W. Chipman (2008): Remote Sensing and Image Interpretation. Sixth Edition. Wiley-India Edition.

6. Wim H. Bakker, Lucas LFJanssen, Colin W.Reeves (2001), ITC: Principles of Remote Sensing.

7. Canadian Center for Remote Sensing (http://www.nrcan.gc.ca/): Tutorial, Fundamentals of Remote Sensing.

8. Sh.S.Shokirov, I.M.Musayev, MSAkbarov "From a distance "probe "training Handbook Tashkent 2015.

5