**CGIAR Wheat Growth Stage Challenge**

[Picture-based insurance (PBI)](https://www.ifpri.org/project/PBInsurance)improves crop insurance for small scale farmers around the world, where images from a smartphone camera keep a record of a crop’s growth and record any damage events that will affect insurance payouts. PBI is a great way for insurers to verify events and to monitor crop growth, but it can also generate overwhelming amounts of data once images stream in from thousands of farmers.

For this competition, you will help us automate one part of the data processing pipeline: estimating the growth stage of a wheat crop based on an image sent in by the farmer. The images are automatically cropped to show a section of the field. Your model must take in an image and output a prediction for the growth stage of the wheat shown, on a scale from 1 (crop just showing) to 7 (mature crop). Your solution must operate on the input image ONLY - no additional data may be used.

The PBI project is led by the [International Food Policy Research Institute (IFPRI)](https://ifpri.org/) and supported by CGIAR Research Programs for [Climate Change, Agriculture and Food Security (CCAFS)](https://ccafs.cgiar.org/increasing-food-security-and-farming-system-resilience-east-africa-through-wide-scale-adoption), [Policies, Institutions and Markets (PIM)](https://pim.cgiar.org/), and [Big Data in Agriculture](https://bigdata.cgiar.org/), as well as [UK Natural Environment Research Council (NERC)](https://nerc.ukri.org/) and [International Initiative for Impact Evaluation (3ie)](https://www.3ieimpact.org/). The PBI data was collected in partnership with the [Borlaug Institute for South Asia (BISA)](https://bisa.org/) and the [Centre for Agriculture and Bioscience International](https://www.cabi.org/).

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Predict which phase of growth wheat crops are in using photos taken by farmers in India

I was ranked 164 out of 204. My score is among the best 41.

ended 7 months ago

**Built With**

* Python 3.7

**Get Started**

* Download Python and install
* Using ‘pip install command’ on command prompt, install numpy, pandas, sklearn, PIL, statistics, seaborn, csv, os, matplotlib and any other libraries that may be requested
* Start python. In the python shell, click file and select open. Then, pick kNN\_LogReg\_kFoldCV\_WheatGStage.py. The images.zip is about 400mb. If there is a way to send it, I will do that.