AUGMENTA
PRECISION AGRICULTURE · REDEFINED

AUGMENTA'S MULTIZONE N VRA

AUGMENTA Agriculture Technologies

Imprecise Fertilization

Agronomically

Inadequate fertilisation will negatively affect yield. However, excessive Nitrogen application and subsequent vegetative growth might also compromise productivity, **point (a)**, while it increases the risk of pest and disease outbreaks, and lodging.

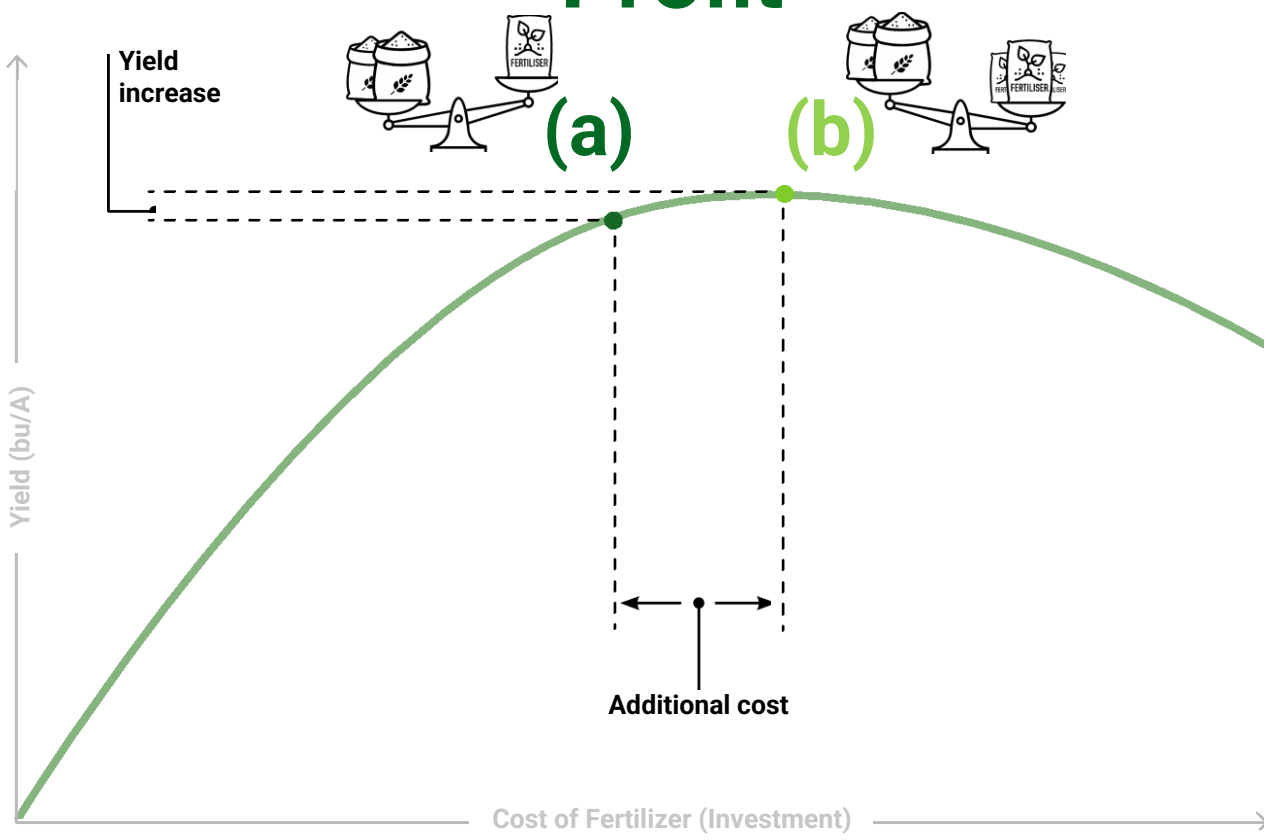
Financially

Beyond a certain point, yield increase does not justify the additional fertilization costs required, **point (b)**.

Environmentally

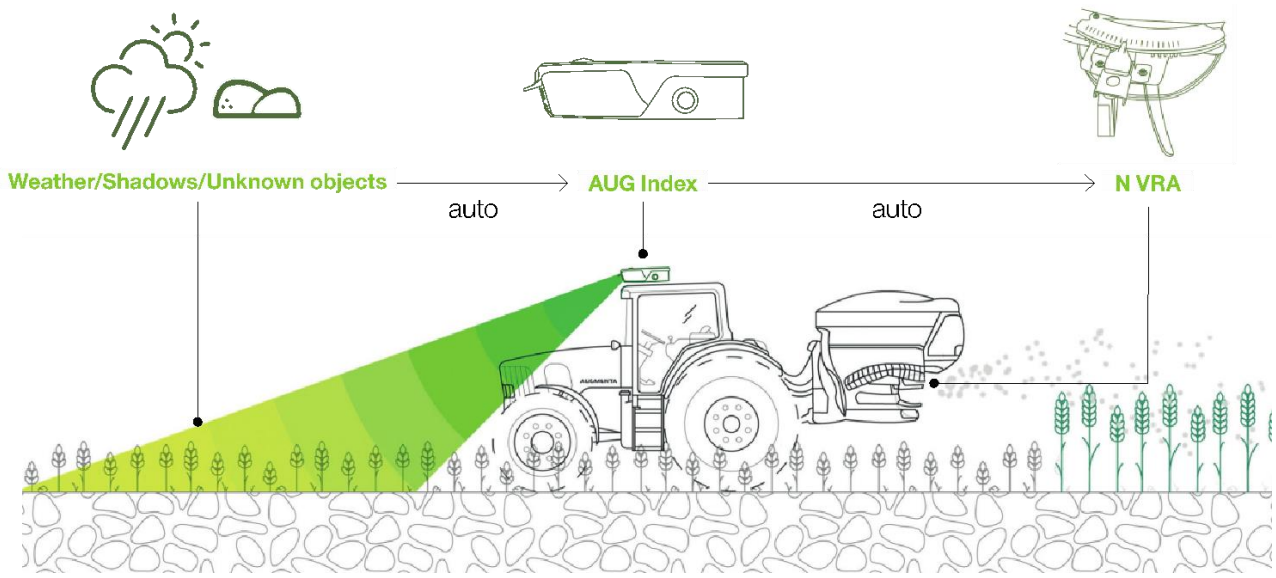
Excessive or untimely application has an increased environmental impact and might imperil sustainability of crop production.

Yield vs Profit



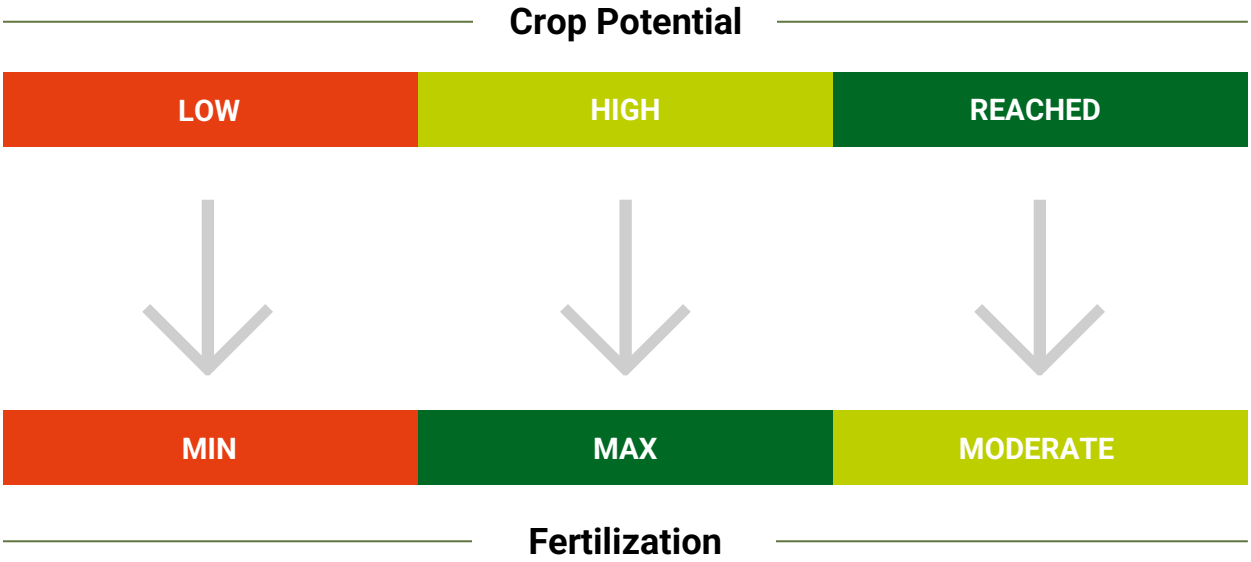
Our Approach

Advanced growers have adopted multi-zone management to increase their nitrogen use efficiency (NUE). Augmenta System can further improve NUE by utilizing data describing the current needs of a zone complementary to the ones determined during zone management. Augmenta System is auto-calibrated through a variety of parameters registered, so as to consistently produce a vegetation index (AUG Index) map of a field under variable conditions. This map is then utilised for the realisation of a Variable Rate Application of Nitrogen fertilizer (N VRA).

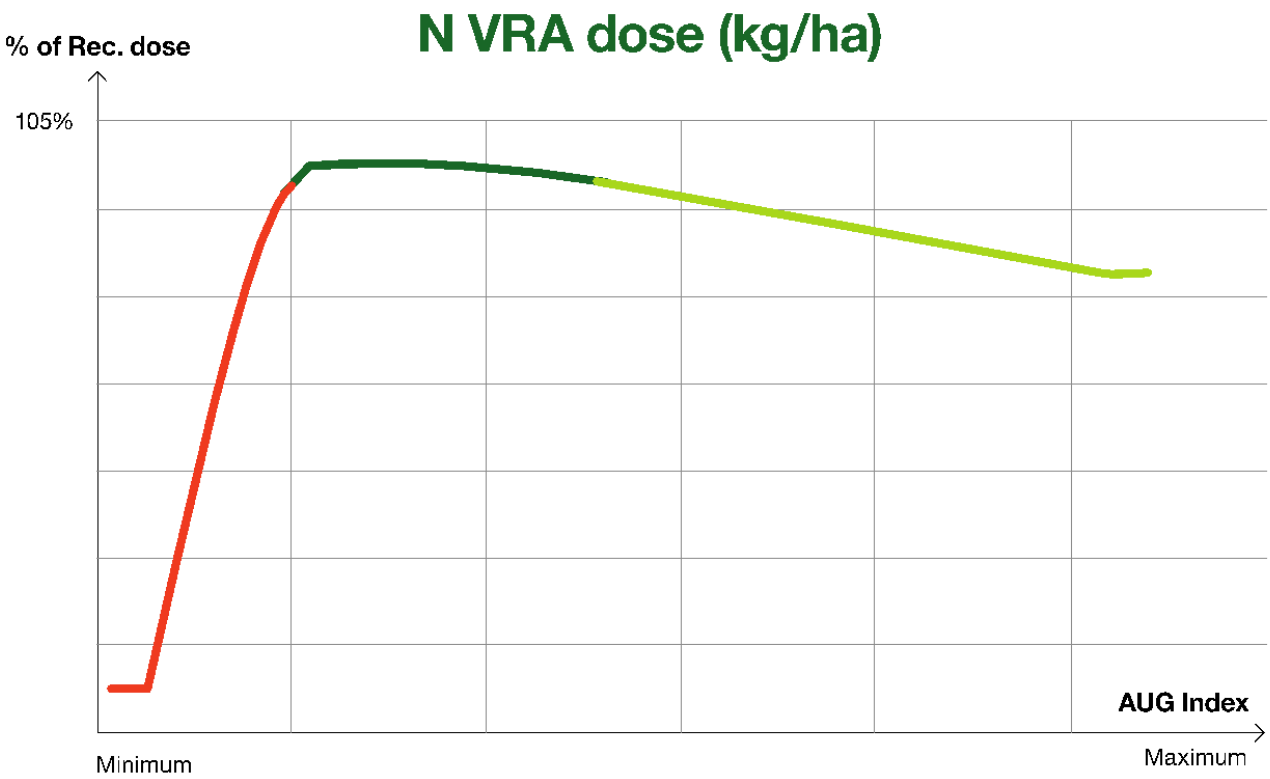


Dynamic N VRA Operation

During an N VRA, Augmenta's dynamic algorithm utilises the AUG Index map to assess and categorize, in real time, the productivity potential of different areas within each zone in a field so as to adjust the dose of fertiliser applied. **Identification of the different types of areas is automatic and self-calibrating with no farmer actions required.**



N VRA Algorithm



Recommended Dose (Rec Dose) is defined by the farms agronomist or manager and is the MAXIMUM dose to be implemented.

Low potential areas

where plant growth has been severely inhibited and are beyond the point of effective recovery. The amount of fertilizer will be decreased to a minimum to reduce cost and environmental impact.

High potential areas

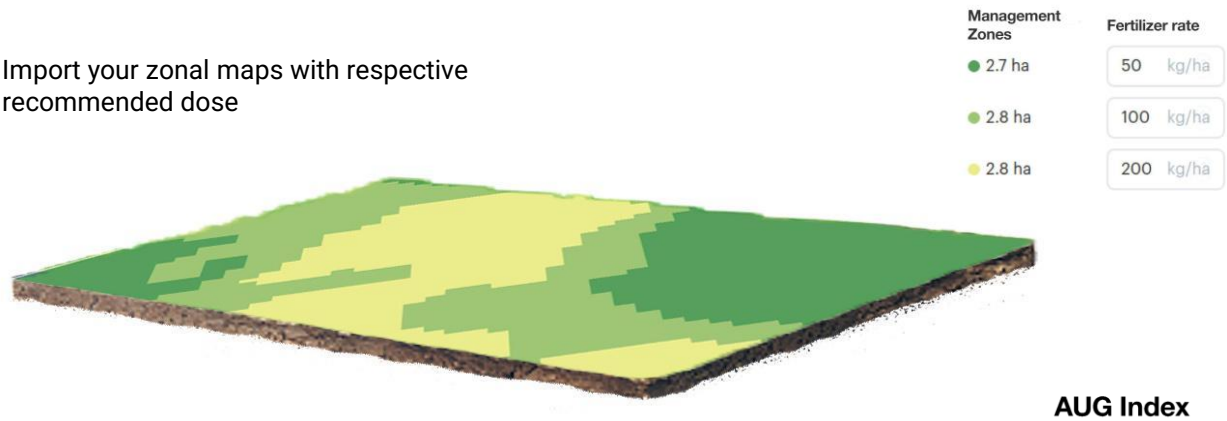
will benefit most by fertilization as it will allow the plants to reach their full potential. Thus, the maximum amount (close or equal to the recommended rate) will be applied to improve productivity.

Reached potential areas

where plants are growing optimally, since their N needs have largely been met. A moderate reduction in the amount of fertilizer applied will occur to enhance productivity while minimizing cost.

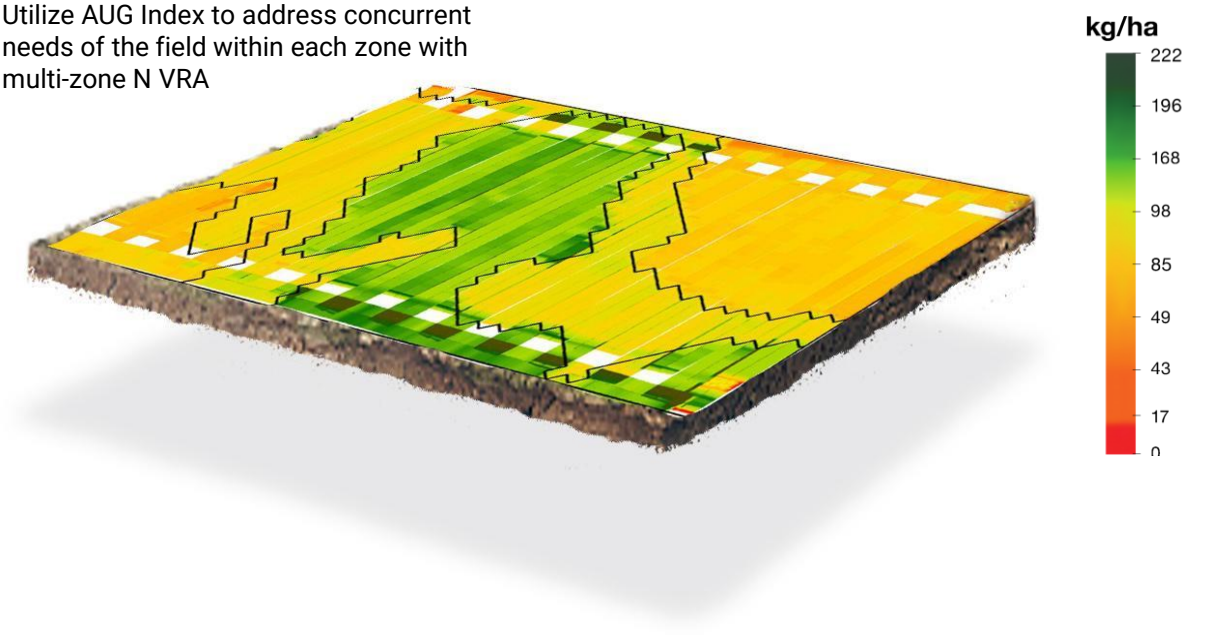
Multi-zone N VRA Fertilizer Application

1 Import your zonal maps with respective recommended dose



2 Use Augmenta System to gather field data

3 Utilize AUG Index to address concurrent needs of the field within each zone with multi-zone N VRA



Current version Multi-zone NVRA does not support zones based on different hybrids/cultivars, seeding dates and seeding rates.

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HQ: A**UGMENTA HOLDING** | 40 rue des Blancs Manteaux, 75004 Paris, France
US Tel.: +1 512 790 4660 | e-mail: info@augmenta.ag | www.augmenta.ag

R&D: **AUGMENTA AGRICULTURE TECHNOLOGIES** | 8 Iereos Dousi str., 15124 Marousi, Greece