

## بيانات البحث رقم (٥):

AgroSupportAnalytics: big data recommender system for agricultural farmer complaints in Egypt	عنوان البحث باللغة الإنجليزية
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### ملخص البحث باللغة الإنجليزية:

The world's agricultural needs are growing with the pace of increase in its population. Agricultural farmers play a vital role in our society by helping us in fulfilling our basic food needs. So, we need to support farmers to keep up their great work, even in difficult times such as the coronavirus disease (COVID-19) outbreak, which causes hard regulations like lockdowns, curfews, and social distancing procedures. In this article, we propose the development of a recommender system that assists in giving advice, support, and solutions for the farmers' agricultural related complaints (or queries). The proposed system is based on the latent semantic analysis (LSA) approach to find the key semantic features of words



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used in agricultural complaints and their solutions. Further, it proposes to use the support vector machine (SVM) algorithm with Hadoop to classify the large agriculture dataset over Map/Reduce framework. The results show that a semanticbased classification system and filtering methods can improve the recommender system. Our proposed system outperformed the existing interest recommendation models with an accuracy of 87%.