KLUM: A SIMPLE MODEL OF GLOBAL AGRICULTURAL LAND USE AS A COUPLING TOOL OF ECONOMY AND VEGETATION

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Abstract. The *Kleines Land Use Model* (KLUM), is a global agricultural landallocation model, developed as a tool to dynamically couple global state-of-the-art vegetation and economy models. The allocation process is based on profit maximisation, assuming risk aversion and decreasing returns to scales. The model is suited for long-term predictions, acknowledges spatial and biophysical diversity and enables the data exchange with common vegetation models. Finally, the effective simplicity of the mechanism facilitates online-coupling with larger models.

Simulations of future crop allocation under climate change suggest that cultivation of cereals would fall in favour of minor crops such as vegetables and fruits. Total revenue of crop production is predicted to increase for most parts of the world. The comparison with two reference scenarios, where solely prices or yields are changed show that the observed results are dominated by the induced price changes. Losses in revenue prevail and changes in area are more balanced over the world when only the much smaller yield changes are applied. Yet, the simple sum of price and yield effects on crop allocation can differ in magnitude and sign from the real dynamics, emphasising the importance of simultaneous inclusion of economic and biophysical aspects of land-use decisions.

Keywords: global land-use model, crop allocation, feed back loop, climate change

1. Introduction

Land-use constitutes one of the essential links between biosphere and anthroposhere. Large parts of the terrestrial land surface are used for agriculture, forestry, settlements and infrastructure. Changes in the land-use directly influence the natural environment. They influence the nutrient and water cycles. They govern a large part of greenhouse gas emissions. They determine landscape design, have an impact on biodiversity and may even alter the albedo. On the other hand, landuse changes also affect the social and economic environment. The use of land determines the economic revenue of land-intensive productions. Current as well as past land-use shapes the social and environmental surrounding of people. Finally, land-use decisions are triggered by environmental properties and motivated by socio-economic drivers, building a vital feedback loop of the interaction of human societies and the natural environment (Lambin et al., 2003).

Given the importance of this feedback loop, it is essential to understand the underlying motivations of land-use decisions and the resulting emergence of land-use patterns. Land-use models are needed to analyse the complex structure of linkages and feedbacks and to determine the relevance of drivers. They are used to project the magnitude, character and location of land allocation changes under different boundary conditions, supporting the analysis of drivers and processes as well as land-use and policy decisions.

Many important drivers and consequences of land-use change are of global extent. Land-use changes and environmental impacts are often spatially and temporally disjoint (Krausmann, 2004) and interlinked by means of international trade. For these reasons, some of the important impacts and processes of land-use changes need to be addressed on a global scale. However, for reasons of low data availability and since many important drivers of land-use decisions, such as land suitability are changing on a rather fine spatial scale, global approaches are still rare.

Current approaches to simulate global land-use changes still tend to over-emphasise either the geographic or the economic aspect, neglecting their interactions (Heistermann et al., submitted). Geographic models are commonly based on detailed biophysical characteristics of land. They focus on the dynamics of spatial patterns of land-use types by analysing land suitability and spatial interaction. Allocation decisions are based either on empirical-statistical evidence (as e.g. in the family of CLUE models (*Conversion of Land Use and its Effects*), see e.g. (Veldkamp and Fresco, 1995; Kok and Veldkamp, 2001)) or formulated as decision rules, based on case studies and common sense (as e.g. in Syndromes (Petschel-Held et al., 1999) and in the dynamic simulation model of land-use changes in Sudano-sahelian countries of Africa (SALU) (Stephenne and Lambin, 2001a; Stephenne and Lambin, 2001b)). In both cases the projections are based rather on observed behaviour than on underlying economic motivations. This limits their projection horizon and their capability to represent the impact of market interactions, such as economic competition among different land-intensive sectors (for more details on geographic land-use models see e.g. (Veldkamp and Lambin, 2001)).

In economic models, land is usually implemented as a constraint in the production of land-intensive commodities and the focus is more on market impacts and resulting emissions of land-use than on its allocation. The *International Model for Policy Analysis of Agricultural Commodities and Trade* (IMPACT) (Rosengrant et al., 2002), the *World Agricultural Trade Simulation Model* (WATSIM) (Kuhn, 2003) and the *Global Trade Analysis Project, Energy - Land* model (GTAPE-L) (Burniaux, 2002; Burniaux and Lee, 2003) are prominent examples. These models are based on economic motivations, qualifying them for long-term predictions and a dynamic representation of market impacts. Their limitation mainly manifests in the representation of land. Land is treated as homogeneous and space-less, ignoring biophysical characteristics and spatial interactions (for more details on economic land-use models see e.g. (Balkhausen and Banse, 2004; van Tongeren et al., 2001)).

There is a trend in both directions to improve their work by introducing the respectively missing aspect into their tools. Global economic models seek to improve their representation of land by dividing the land into different classes, based on geographic assessment. The *Future Agricultural Resources Model* (FARM) (Darwin et al., 1995; Darwin et al., 1996) was one of the first to use the so-called *Agro-Ecological Zone* methodology. According to the dominant climatic and biophysical characteristics, land is subdivided into different classes, reflecting the suitability for and productivity of different uses. Even though this improves the representation of environmental impacts on the economy, still the location of changes and the reverse effect on the environment are not simulated.

Global geographic approaches commonly aim to improve their economic rational by introducing economic properties such as demand as boundary conditions. In the *Integrated Model to Assess the Global Environment* (IMAGE) (Alcamo et al., 1994; Zuidema et al., 1994; RIVM, 2001) the *Land Cover Model*, an allocation tool based on cellular automata, allocates the commodity demands, as calculated by the *Agricultural Economy Model* (Strengers, 2001) according to land potential on a 0.5×0.5 grid. However, the economic demand module is theoretically weak as trade and market interactions are not dynamically represented. The EURURALIS project (van Meijl et al., submitted) aims at improving this weakness, by coupling the IMAGE model to GTAPEM (Hsin et al., 2004), a version of the standard GTAP model (Hertel, 1997), which has an extended agricultural sector. Crop yields and a feed conversion factor, determined by IMAGE are exchanged with production of food and animal products and a management factor (describing the degree of land intensification) as calculated by GTAPEM. The advantage of coupling the two comprehensive models lies in detail and comprehensiveness of process representation. Moreover, this is one of the few approaches, where a feedback between economy and vegetation is at least partly realized. Against these achievements stands the risk of producing redundancies and inconsistencies, since some processes, as for instance the allocation of land are implemented in both models.

The global agricultural land-use model *Kleines¹ Land Use Model* (KLUM) was developed to establish a link between biosphere and economy in a global integrated assessment model (IAM). We reduce the risk of redundancies and inconsistencies by *outsourcing* the allocation process from the larger models. At the same time we benefit from the comprehensive process representation of the specialized models by utilizing their output for the allocation process. Feeding back the allocation pattern to the larger models completes the feedback loop of economy and vegetation.

The Agricultural and Land Use model AgLU (Sands and Leimbach, 2003) and the land-use choice module (Tan et al., 2003) follow a similar approach. The AgLU model, a global partial equilibrium model, is used to provide a feedback between the climate and economic core models of the Integrated Assessment of Climate Protection Strategies model (ICLIPS) (Toth et al., 2003). Based on gross domestic product (GDP) and carbon price of the economic model, land is allocated according to proportional revenues of the possible uses. The resulting carbon emissions are calculated and fed back to the climate model. Biophysical characteristics of land are considered via a joint probability distribution, which determines the productivity of land. Still, this approach neither links land-use changes to specific geographic locations nor does the probabilistic representation of land productivities capture the true variability of land within a region or allows for a feedback to a vegetation model.

In KLUM we represent geographic location and biophysical heterogeneity of land by using spatially explicit potential productivities, as can be calculated by a vegetation model. The allocation is determined

on the resolution of the biophysical input, which enables the direct utilisation of the results in the vegetation model.

The land-use choice module is a more geographically based approach to couple the global partial equilibrium model IFPSIM (International food policy simulation model) (Oga and Yanagishima, 1996) to the crop growth model EPIC (Erosion Productivity Impact Calculator) (Williams, 1995). Based on potential yields, as calculated by EPIC, and market prices as determined by IFPSIM, the utility of different landuse alternatives is calculated. From this, the land-use choice module chooses the set of alternatives with highest utility by means of logistic regression. The resulting allocation is calculated on a 0.1×0.1 grid resolution. Analogously to common geographic approaches, the regression technique allows for an easy inclusion of other than monetary factors influencing land-use patterns but the ad-hoc definition of utility limits the long term predictability.

We derive the allocation algorithm of KLUM from a maximization of profit. This explicit motivationally based approach ensures validity also for long-term predictions. The model replaces the internal allocation mechanism of the economy model that solely provides the equilibrium prices for the optimisation. The aggregated allocation can be fed back as production-specific land endowments to the economy model.

In the next section we present the model structure, outline the underlying assumptions and describe the implementation. We document the calibration and a thorough evaluation of the model performance by means of analytical as well as numerical analysis in section 3. Section 4 discusses the results for climate change on economic growth. Section 5 concludes.

2. The model

KLUM runs on an exchangeable spatial resolution and with 1 year time-steps. The model is designed for global coverage and a possible time horizon of several centuries. The allocation decision in each spatial unit is independent of adjacent units and preceding allocations. The size of the spatial units is flexible. Decisive parameters for the allocation process are crop prices and potential yields. Calibrated parameters are cost parameters and risk aversion. Currently, the model is calibrated according to data of FAOSTAT (FAO, 2004) and World Development Indicators (World Bank, 2003) to reproduce the allocation of 8 different crop aggregates (see table I) for 181 countries (see appendix table V).

Description
Paddy rice
Wheat
Maize(corn), Barley, Rye, Oats, Other cereals
vegetables, Roots and Tubers, Fruits, Nuts
Oil seeds and oleaginous fruits
Plants used for sugar manufacturing
Raw vegetable materials used in textiles
Flowers, vegetable-, fruit- and flower-seeds, spice crops etc.

Table I. Crop aggregation of KLUM, adopted from (GTAP, 2005).

2.1. Purpose and basic underlying assumptions

We design the model as an interface between biosphere and economy in a global integrated assessment model. Its objective is to reproduce the key-dynamics of land allocation to capture the characteristic trait of the feedback-loop between vegetation and economy. Thus, the focus lies on simplicity and efficiency in order to guarantee computational feasibility as well as to facilitate structural interpretation of model performance and results.

In the developed model the maximisation of achievable profit is assumed to be the driving motivation underlying the simulated land-use decisions. In each spatial unit we calculate and maximise the expected profit per hectare in order to determine the most profitable allocation in this unit. Thereby risk aversion as well as decreasing return to scale are assumed. The sum of these separately optimised allocations is equivalent to the global optimal allocation.

By using spatially explicit potential yields in the optimisation, the results account for geographic and biophysical heterogeneity of land and assure the spatial detail required for a data exchange with a global state-of-the-art vegetation model. Prices instead are defined on a regional level, to enable coupling to a state-of-the-art world trade model.

2.2. IMPLEMENTATION

We derive the allocation algorithm by maximising the achievable profit per hectare of each spatial unit. Profit per hectare π of one grid-cell is represented by:

$$\pi = \sum_{k=1}^{n} \left(p_k \alpha_k l_k - \tilde{c}_k \bar{L} l_k^2 \right) - \gamma \mathbb{V} \operatorname{ar} \left[\sum_{k=1}^{n} (p_k \alpha_k l_k - \tilde{c}_k \bar{L} l_k^2 \right]$$
(1)

The first part of the equation describes the expected profit, where p_k is the price per product unit, α_k is the productivity per area and l_k denotes the share of total area \bar{L} allocated to crop $k \in \{1...n\}$ of n crops. $\tilde{c_k}$ is the cost parameter for crop k. Total costs are assumed to increase in land according to

$$C = \sum_{k=1}^{n} C_k(L_k) L_k$$

with $C_k(L_k) = \tilde{c}_k L_k, \forall k \in \{i \dots n\}$
$$\Rightarrow C = \sum_{k=1}^{n} \tilde{c}_k L_k^2$$
(2)

where $L_k = l_k \bar{L}$ denotes the area allocated to crop k.

The second term of equation (1) represents the risk aversion of the representative land-owner and implicitly accounts for crop rotation considerations. To minimize the risk monoculture is avoided in favour of a crop mix. We quantify the perception of riskiness by the temporal variance of the expected profit, weighted by a risk aversion factor $0 < \gamma < 1$.

Maximising π under the constraint that the land shares need to add up to a total not greater than one, an explicit expression for the land-share l_i allocated to crop $i \in \{1...n\}$ can be derived:

$$\max[\pi] \qquad \text{s.t.} \sum_{k=1}^{n} l_k \le 1$$
$$\Rightarrow l_i = \frac{\frac{1}{2} \sum_k \frac{\beta_i - \beta_k}{c_k + \gamma \sigma_k^2} + 1}{\sum_k \frac{c_i + \gamma \sigma_i^2}{c_k + \gamma \sigma_k^2}} \tag{3}$$

where for convenience $\beta_k = p_k \alpha_k$ displaces the profitability of crop k, $\sigma_k^2 = \operatorname{Var}[\beta_k]$ displaces the respective variance; $c_k = \tilde{c_k} \bar{L}$. The temporal variability of total costs is assumed to be negligible compared to the variability of prices and productivities.

In the applied model, cost parameters and risk aversion factors for each spatial unit are determined by calibration. Variances are calculated from five preceding time-steps (initialised by the variance of the complete time-horizon). For the allocation decision of time t, prices and potential yields of time t-1 are assumed to be decisive. Prices are defined for world-regions in 5-year time-steps, reflecting the temporal and spatial structure of common state-of-the-art global trade models. Potential yields are defined on a finer spatial resolution and on a yearly basis, analogous to common state-of-the-art vegetation models. To account for memory effects, we calculate the decisive yield $\alpha(t)$ as the weighted mean of the actual yield $\alpha(t)$ of the respective and the decisive yield of the preceding time-step $\alpha(t-1)$:

$$\alpha(t) = (1 - m)\alpha(t - 1) + m\tilde{\alpha}(t) \tag{4}$$

In current simulations, m is set to 0.3 since this gives a reasonable fit to the data. We apply the same relationship to the variance.

To avoid negative allocation, negative shares are set to zero and the allocation process is repeated for the remaining crops.

3. Calibration and validation

As emphasised we base the derived algorithm on the assumption that profit maximisation is a predominant driver of human induced land-use changes. Below, we assess the validity of this assumption as well as the suitability of the developed model for its purpose.

As a first step, we inspect the derived algorithm analytically concerning its mathematical dynamics to assure an accordance with intuitive logic. Secondly, we evaluate the model numerically to assess the performance and to identify potentials and limits. For this, we use the calibrated model to reproduce historical land-use changes and compare the results to observed data with respect to temporal and spatial accordance.

3.1. Algorithm dynamics

The major drivers of land allocation in KLUM are profitability β and its variability σ^2 of each crop. In the following we study the impact of changes in a crop's β_i and σ_i^2 on its own land-share l_i and the remaining crop's land-shares $l_{j\neq i}$. Solving the respective derivatives of the allocation algorithm equation (3) yields:

$$\frac{\partial l_i}{\partial \beta_i} = -\frac{1}{2} \frac{\sum_{k \neq i} \frac{1}{c_k + \gamma \sigma_k^2}}{\sum_k \frac{c_i + \gamma \sigma_k^2}{c_k + \gamma \sigma_k^2}} > 0$$
(5)

$$\frac{\partial l_i}{\partial \sigma_i^2} = -l_i \gamma \frac{\sum_{k \neq i} \frac{1}{c_k + \gamma \sigma_k^2}}{\sum_k \frac{c_i + \gamma \sigma_i^2}{c_k + \gamma \sigma_k^2}} < 0$$
(6)

$$\frac{\partial l_j}{\partial \beta_i} = -\frac{1}{2} \frac{\frac{1}{c_j + \gamma \sigma_j^2}}{\sum_k \frac{c_i + \gamma \sigma_i^2}{c_k + \gamma \sigma_k^2}} < 0$$
(7)

$$\frac{\partial l_j}{\partial \sigma_i^2} = -l_i \gamma \frac{\frac{1}{c_j + \gamma \sigma_j^2}}{\sum_k \frac{c_i + \gamma \sigma_i^2}{c_k + \gamma \sigma_i^2}} > 0$$
(8)

The results are intuitive: an increase in a crop's profitability increases its own and decreases the remaining land-shares; an increase in a crop's riskiness decreases its own and increases the remaining land-shares. The total amount of changes naturally adds up to zero.

Furthermore, interpreting σ^2 as a measure of riskiness, the results show that the effect of riskiness depends on the allocated share. $\tilde{l} = \frac{1}{2\gamma}$ marks the share of land for which a change in riskiness and a change in profitability are valued equally; for shares greater than \tilde{l} , riskiness is valued higher than profitability whereas for shares lower than \tilde{l} , profitability is more influential than the risk. Restricting the risk aversion parameter to be $0 < \gamma < 1 \Rightarrow \tilde{l} \ge 0.5$ implies that at most riskiness dominates for crops planted at more than half of total cropland. Calibration exercises with unbound γ support the assumed restriction. Only for very few countries (mostly countries with problematic data) risk aversion exceeds the value of one. For calibration with bound γ for nearly all countries $\gamma < 0.5 \Rightarrow \tilde{l} > 1$, implying that in the respective country profitability always dominates risk (see appendix table VI).

3.2. Numerical assessment

For the numerical assessment we use the available data of FAOSTAT (FAO, 2004) for the time-period 1966-1997 on yield, prices and harvested area. We aggregate the data of 134 available crops to 8 aggregates² (as shown in table I). Prices are standardized to constant US dollars based on year 1995, by means of GDP data and inflation-rates as documented in the World Development Indicators (World Bank, 2003) ³. Excluding countries with data for less than 6 years or 1 crop-aggregate leaves us with 163 countries for the validation exercise (see appendix table V). For the moment, we prefer the national resolution to a subnational grid-resolution as consistent data are readily available. Prices are aggregated to 16 regions (see table II) and averaged over 5 years in order to imitate the coupling situation in most IAMs, where economic trade models commonly operate on coarse spatial and temporal resolution. We assume the total available land \bar{L} to stay constant during the simulation.

Acronym	Name
USA	USA
CAN	Canada
WEU	Western Europe
JPK	Japan and South Korea
ANZ	Australia and New Zealand
CEE	Central and Eastern Europe
FSU	Former Soviet Union
MDE	Middle East
CAM	Central America
SAM	South America
SAA	South Asia
SEA	Southeast Asia
CHI	China, North Korea & Mongolia
MAF	Mediterranean Africa
SSA	Subsaharan Africa
SIS	Small Island States

Table II. World regions in KLUM. The affiliation of countries is presented in the appendix table V

For every country we use the first half of the available time-period for calibrating risk-aversion and cost parameters. For this, we minimise the sum of mean-squared-errors of model results and observed data ⁴. In the optimisation the cost parameters $\tilde{c}_{k \in \{1...n\}}$ are restricted to be positive and in the same order of magnitude as the revenues $\beta_{k \in \{1...n\}} L_{k \in \{1...n\}}$ (notation as in preceding equations); risk aversion parameters are forced to satisfy $0 < \gamma < 1$. In order to study the performance of the calibrated model we use the data of the second half of the available time-period to calculate the evolving crop-pattern and we compare the results to the observed data on harvested area.

Figure 1 - 3 highlight different aspects of the model performance. In Figure 1 we compare the global pattern of prevailing crops for modelled and observed allocation. The prevailing crop is defined as the crop with the highest area-share, averaged over the validation time-period. Note that this does neither necessarily imply that the majority of the available land is allocated to the prevailing crop, nor that the crop has a predominant economic relevance in that country.

In order to evaluate the sub-national patterns, we depict the percentage deviation of simulated from observed means in figure 2 and the



Figure 1. The pattern of prevailing crops for the validation period.

correlation of model results and observed data in figure 3. We do this for *wheat*, *rice* and *cereal grains nec*. The accordance of means reflect the spatial exactness of the simulated pattern, whereas the correlation quantifies the degree of temporal accuracy. As a measure of correlation we chose the Fisher-Z transformed correlation coefficient, since in its value it accounts for the amount of data points and, moreover, allows a direct comparison of different values. In order to emphasise units where the depicted crop exceeds a certain relevance with respect to the cultivated area share, we highlight countries with a respective land share $l \geq 0.1$.

All figures show a good accordance of model results and observed data. Only for 33 of the 163 countries the prevailing crops are falsely predicted. The number and percentage of countries with false predicted prevailing crop in each region and observed and simulated prevailing crop on the regional aggregation can be found in table III. Falsely predicted prevailing crops are often a result of similar price and/or yield structure for two crops (such as wheat and cereal grains nec for price and yield in Canada, or the price of cereal grains and vegetables and fruits in Subsaharan Africa). Similar profitabilities can lead to two dominant crops. The dominance of one over the other is a mat-

Region	false/total	%	observed	simulated
ANZ	0/2	0	wheat	wheat
CAM	0/8	0	cereal grains nec	cereal grains nec
CAN	1/1	100	wheat	cereal grains nec
CEE	2/5	40	cereal grains nec	cereal grains nec
CHI	0/3	0	paddy rice	paddy rice
JPK	0/2	0	paddy rice	paddy rice
MAF	1/5	20	wheat	cereal grains nec
MDE	3/14	~ 21	wheat	wheat
SAA	0/7	0	paddy rice	paddy rice
SAM	6/13	~ 46	cereal grains nec	cereal grains nec
SEA	1/11	~ 9	paddy rice	paddy rice
SIS	5/29	~ 17	Sugar cane/beats	Sugar cane/beats
SSA	7/43	~ 16	cereal grains nec	cereal grains nec
USA	0/1	0	cereal grains nec	cereal grains nec
WEU	7/19	~ 37	cereal grains nec	cereal grains nec

Table III. Number and percentage of false predicted prevailing crops per region. Observed and simulated prevailing crop on regional aggregation.

ter of habit or politics, which cannot be reproduced by the chosen mechanism. Even though the highest percentage of failure occurs in Canada, Western Europe and South America, only for Canada and Mediterranean Africa the prevailing crop has been falsely predicted on a regional aggregation of area and area shares.

The deviations of simulated and observed mean are in general rather low. For area shares of more than 10% of total cropland, the deviations of simulated and observed mean seldom exceed 20% and are even lower for most of these countries. The same goes for the correlation, which also tends to be better for crops with *relevant* area shares. Of the depicted crops, the results for *wheat* show the best correlation and the results for *cereal grains nec* are in greatest accordance with the observed mean. Paddy rice projections are weakest in correlation and mean, which can be interpreted as just another aspect of the fact that crops with high area shares are reproduced better. The overall picture shows that the model is weakest in Africa and strongest in Asia, except for *paddy rice*, which is weakest in China. The comparably bad reproduction of *paddy rice* in China results from a strong decrease in China's paddy rice production in favour of oil seeds and other crops which is not represented by the model in the validation period. This trend is not explainable by the profitability of the crops as it is not



Figure 2. The percentage deviation of mean area share over the validation period for model results to observed data. For blue countries the model underestimates the changes, for red countries the changes are overestimated by the model

visible in price and yield data. Thus this change cannot be reproduced by the model.

4. Future scenarios

Tan and Shibasaki (2003) present estimates of changes in yield due to climate change of the major crops for several countries around the world. They utilise climate change data from the first version of the *Canadian Global Coupled Model* (CGCM1)⁵ to quantify monthly minimum and maximum temperature and precipitation. Adaptation is taken into account by means of changing planting dates.

Based on their estimates for 2050 we determine potential yields under climate change of *wheat*, *paddy rice* and *cereal grains nec*, to simulate the effects of a changing climate on crop allocation. We use the predictions of yield changes in maize to adjust potential production of *cereal grains nec*, even though this is an aggregate of many different cereal crops weighted differently in different countries. However, in many countries maize is the dominant or one of the dominant aggregates, suggesting that this simplification is acceptable. Prices are



Figure 3. The Fisher-Z-transformed correlation coefficients over the validation period of model results and observed data. Green symbolizes good correlation, whereas red depicts negative correlation.

assumed to develop with a continued linear trend, as estimated from past years. For future simulations the model is calibrated with the complete dataset, which also includes countries with less than 6 years of data (see appendix table V). We determine the optimal allocation of the 8 crop aggregates for the 83 countries used in Tan and Shibasaki's study for 1997 and 2050. In the simulation the variances σ^2 are set to the temporal average of past variances. Potential productions of the remaining crop aggregates are assumed to continue on the level of 1997.

In figure 4, we depict the resulting area changes for *wheat*, *paddy rice* and *cereal grains nec* (the complete set of results is summarized in the appendix table VII). They show a decline in area for all 3 depicted crops in nearly all countries. Especially the area in *cereal grain* production is reduced up to complete disappearance in countries of the Eastern Bloc. The greatest increase of area for *cereal grains nec* can be found in Bangladesh and Japan by 20–32%. For *wheat*, area increases in South America by up to 75%, in Canada by some 7% and in Eastern Europe and Japan by up to 55%. The greatest decrease of area for *wheat* takes place in Africa, where it partly vanishes to zero and South Asia/China, where the area is nearly halved. Also *paddy rice* cultivation tends to disappear in Africa and is strongly reduced in most other



Figure 4. Percentage area changes 1997-2050 for wheat, cereal grains nec and paddy rice under climate change (scenario A). Blue depicts negative, red positive changes

countries. However, in the Former Soviet Union and the Middle East, the area share of *paddy rice* increases by up to 150–166% (Hungary and Kazakhstan). The area changes reflect a shift in total global crop production away from major crops, such as wheat, paddy rice, other cereal grains and also oil seeds towards minor crops, such as vegetables and fruits, sugar crops, plant based fibres and other crops (see table IV).

To quantify the impacts of climate change, figure 5 shows changes in total revenue from crop production from 1997 to 2050 (the respective results are summarized in the appendix table VIII). Strong gains govern the overall picture. Only North America, Sweden and Italy show losses in revenue. They range from -12% to -73% (USA and Italy). Greatest gains are achieved on the Asian continent where for many countries revenue is up to quintuple. Some African and South American countries double or even triple there revenue of crop production. Compared to this, the gains of about 2–50% obtained in Western Europe are modest.

To highlight the importance of land-use changes for these impact assessments, the lower graph of figure 5 presents percentage deviation of revenue changes calculated without area changes from the above depicted changes. For nearly all the simulated countries losses are overestimated whereas gains are underestimated, if area changes are not taken

Crop	Scenario A %	Scenario B %
Wheat	-12.84	+0.18
Paddy rice	-21.62	-0.12
Cereal grains nec	-39.95	-0.10
Vegetables and fruits	+78.41	+0.09
Sugar cane/beats	+54.66	-0.09
Plant-based fibres	+43.16	+0.09
Oil seeds	-9.74	-0.17
Crops nec	+44.60	+0.17

Table IV. Percentage change of total global production 1997-2050 for all simulated crops.



Figure 5. Changes in revenue under climate change (scenario A). The upper graph shows the percentage changes in revenue under consideration of the simulated area changes. The below picture shows the percentage deviation of revenue changes ignoring area changes from the above estimates.

into account. For a few, mainly wealthy countries, such as Switzerland, Germany, Japan and Australia, even the sign of predicted revenue change varies between the different estimates (depicted in dark blue). For all these countries estimates including area changes predict a gain in revenue, whereas the estimates ignoring area changes predict losses.

Besides the simulation of future allocation under climate change (scenario A), we run two diagnostic scenarios - one, in which only yields change and prices are kept constant (scenario B) and one, where prices change and yields are kept constant (scenario C). See appendix table VII for the results. The results of the diagnostic scenarios show that the projected effects of climate change on revenue and crop allocation are mainly a result of the assumed price changes. They exceed the applied yield changes by up to 2 orders of magnitude. Figure 6 shows the changes in area for scenario B as a reference for the impact of the yield changes. The pattern considerably differs from the predictions of scenario A in figure 4. Besides the fact that for all depicted crops area changes are naturally much lower than in scenario A, additionally the occurrence of decreases and increases is more balanced. However, decreases still dominate the picture. For *paddy rice*, we find most increases of area in the Asian countries but also in some South African and South and North American countries. Besides in Zambia, the decrease of area is largest in the Russian Federation, which stands in strong contrast to the predicted increase in area for this country in scenario A. For wheat the production in Europe and South America seems to move from the north to the south (Scandinavia is an exception). Whereas the greatest decrease in area for *wheat* can be seen in the south African countries, great increase can be observed in New Zealand and China. This again stands in contrast to the gains of these countries, predicted in scenario A. In contrast to *wheat*, for *cereal grains nec* the production seems to move from the south to the north (again Scandinavia is an exception). Among others, great increases in area are expected in Poland, which in scenario A is one of the countries where wheat production disappears. The decrease in area is greatest in Central Africa, which is in accordance with predictions of scenario A.

Also in scenario B we observe a shift of global crop production (table IV). However, the global production changes are smaller than in scenario A and the pattern is different. Paddy rice, other cereal grains and oil seeds production declines in favour of wheat, other crops, fruits and vegetables and plant-based fibres. The increase is highest for global wheat production, in contrast to the predicted decrease of wheat production in scenario A. For sugar crops the decline in global production in scenario B stands in contrast to the increase in scenario A.



Figure 6. Percentage area changes 1997-2050 for wheat, cereal grains nec and paddy rice under climate change (scenario B). Blue depicts negative, red positive changes

The pattern of resulting revenue changes is notably different as well for scenario B compared to scenario A (see figure 7). In contrast to the prevailing gains in revenue of scenario A, in scenario B more countries experience a loss in revenue. Gains mainly occur in South Asia, South Africa and North Europe, but also Canada and Mexico and Kazakhstan strongly gain from climate change. Losses govern the rest of the global pattern.

The pattern of percentage deviations of revenue change without area changes to those with area changes is not as straight forward as for scenario A. For nearly all South American countries, for the USA, China and Australia and some African and European countries, losses are over- and gains are underestimated when ignoring area changes. But for larger parts of Eastern Europe and the former Soviet Union, gains are overestimated and losses are underestimated. In contrast to scenario A, in scenario B rather for poorer countries such as Cameroon, Uganda and Zambia the revenue-change predictions differ in sign if area changes are ignored.

The results of the different scenarios also show that the allocation change under simultaneous price and yield changes differ from the linear sum of allocation change under sole price and sole yield changes. In figure (8) the percentage deviation of the summed allocation change of



Figure 7. Changes in revenue under climate change (scenario B). The upper graph shows the percentage changes in revenue under consideration of the simulated area changes. The lower picture shows the percentage deviation from the above estimates of revenue changes ignoring area changes.

scenario B and C from the allocation change of scenario A are shown exemplary for wheat, paddy rice and cereal grains nec. We find that the deviation are highest for cereal grains nec. They range from +255%up to -142%, implying that some changes even differ in sign. However, most deviations are in the range of up to $\pm 10\%$. For paddy rice area changes are overestimated by the simple sum of price and yield effected changes for large parts of the world. For wheat and cereal grains nec the picture is more diverse. However, it can be noted, that in many countries an overestimation of the change in area allocated to wheat comes along with an underestimation of the area change in cereal grains nec, and vice versa. This indicates that especially the representation of competition among similar crops is weak, if price and yield interactions are ignored.



Figure 8. Percentage change of summed allocation-changes of scenario B and C from the allocation-changes under scenario A. For blue countries area changes are underestimates, for red countries the changes are overestimated if effects of price and yield are simply summed up.

5. Discussion and conclusion

Studying environmental impacts on the economy and vice versa requires an effective representation of land-use as the essential link of biosphere and economy. We present a global agricultural land-use model, made to dynamically couple global state-of-the-art vegetation and economy models. In order to capture the economic as well as the biophysical aspects of land-use decisions the model is motivated by profit maximisation, where potential production enters as a spatial explicit decision factor. The restriction to only the essential parameters as well as the motivationally based approach qualifies the model for long-term predictions and online coupling.

The evaluation of the model shows that the derived algorithm is capable of reproducing essential dynamics of land-use decisions, theoretically as well as practically. The dynamics of the derived algorithm are in line with intuitive logic. Global, as well as national past allocation patterns can be reproduced with good accordance. False predictions are often a consequence of impacts that do not necessarily show up in price and yield data, such as political changes or local habits. A more flexible cost structure could improve the capability of the model to better adapt to extreme changes.

The partly weak temporal accordance of the model results with observation indicates that the causal timing of profitability impacts is not as straight forward as assumed in the model. It seems that the time-lag between a change in price or yield and its effect on the allocation can vary for crop, country and even in time. The good accordance of simulated and observed means, however, shows that only the exact timing of the impact is problematic whereas in average profitability changes have the expected effect on the crops allocation. The comparably poor performance of the model for the African continent can be interpreted in two ways; on the one hand the influence of existence farming in Africa is still much greater than in developed countries (Collier and Gunning, 1999), on the other hand data sources for Africa are often inconsistent and doubtful which makes a sound evaluation difficult.

Altogether the evaluation results suggest that despite the weaknesses the trends of global crop allocation are sufficiently reproduced for a global analysis or a data exchange with global economy and vegetation models, respectively.

Simulations of crop allocation under climate change project a large decline of major crops (such as wheat, paddy rice and other cereal grains) in favour of minor crops (such as vegetables and fruits, sugar crops and plant-based fibres) for most countries around the world. Increases are concentrated for wheat in South America and for paddy rice in the Former Soviet Union. KLUM predicts an increase of total revenue of crop production mainly everywhere, save North America. The increases are notably greater in developing than in developed countries. These predictions, however, are mainly determined by the price scenario, which dominates the much smaller yield changes. The pattern of only yield induced impacts looks fundamentally different: whereas positive and negative area changes are more balanced than in the first scenario, the changes in revenue are mainly negative. For some regions we find a shift of wheat production to the south and of other cereals to the north, indicating that wheat is replaced in northern countries by maize or other cereal grains.

The chosen linearly extrapolated price trends imply that minor crops, (such as vegetables and fruits, sugar crops and plant-based fibres) gain in price in comparison to major crops (such as wheat, paddy rice and other cereals). The prices of the minor crops have been increasing or slowly decreasing over the reference years, whereas for major crops prices have been declining more rapidly. In Asian countries and the eastern block, and to a lesser extent also in African countries, prices have been increasing in the reference period for all or at least most of the crops (again with the tendency to increase faster for minor crops). This directly explains the great gains on the Asian continent, in comparison to moderate gains or even losses of the developed world.

Assuming that the chosen price and yield projections are realistic, the results of the 3 different scenarios suggest that price changes will dominate or even outweigh the impacts of climate change. Yet, it should be noted, that the estimates of yield changes of Tan and Shibasaki are rather low, compared e.g. to changes of Rosenzweig et al. (1993), which are similar in sign but up to tenfold in magnitude. Our price extrapolations assume on the one hand, that prices are not affected by climate change and on the other hand, that they are independent of market development: according to these trends the majority of people would change their diet from common grains to fruits, vegetables, sugar crops and plant based fibres. Both implications are rather unlikely. So, the results emphasise once more the necessity to model the complete feedback loop of economy and environment, in order to capture feedbacks of prices and productivities as well as feedbacks and competition among different economic productions and sectors. This research is in progress. The importance of a proper inclusion of land-use changes in impact calculations is pointed up by the presented deviations of calculations with and without area changes. Monetary impacts can be underestimated by more than 200%, and even differ in sign, if land-use changes are ignored.

In a more balanced scenario of prices and yield changes not only the picture of changes would alter but also the effect on the decision of joint price and yield changes would increase. Even for the unbalanced scenario a strong non-linearity in the summed effect of price and yield changes can be detected; the effect is greatest for *cereal grains nec*, which is the crop with the greatest yield changes. Especially the representation of competition among similar crops suffers from an separate inclusion of price and yield effects on allocation. This emphasises the importance to include economic as well as biophysical aspects of landuse change decisions in a common framework, as done in KLUM.

All things considered, the developed model proves as a step in the right direction. Already the offline simulations allow for interesting dynamics and outline the importance of an appropriate inclusion of land-use changes into simulations of future development. To gain an insight into the dynamics of the feedbacks between economy, land-use changes and vegetation, the most important next step is to couple KLUM to a global economic trade model and a global vegetation model. Both couplings are in progress. An increase of the spatial resolution, as

well as a change to a grid-pattern is planned, to match the spatial resolution of common vegetation models. Moreover, to allow for commonly not planted crops to conquered new regions, calibration-parameters for such crops need to be found. For the further future an extension of the agricultural sector to pasture and inclusion of other than agricultural land-uses is planned, as well as an explicit connection to water.

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We like to thank Katrin Rehdanz for valuable discussions and Christine Röckmann for helpful comments. The Volkswagen Foundation and the Michael Otto Foundation provided welcome financial support.

Notes

¹ German for *small*, avoiding the acronym *SLUM*

 2 In the aggregation yields are weighted by the crop's area share and prices by the crop's production share

 3 For some countries WDI (2001) had to be used due to the local currencies choice in the FAOSTAT data

 $^4\,$ The optimisation was done by means of the LSQNONLIN function of MATLAB 6.1

⁵ Provided by the Intergovernmental Panel on Climate Change (IPCC)

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Appendix

A. Model parameters

26

KLUM_WP.tex; 31/05/2005; 15:33; p.26

Region	Country	Region	Country	Region	Country
ANZ	Australia	SAA	Afghanistan	SSA	Angola
	New Zealand		Bangladesh		Benin
			Bhutan		Botswana
CAM	Belize		India		Burkina Faso
011111	Costa Bica		Nepal		Burundi
	Fl Salvador		Pakistan		Cameraan
	Customala				Cameroon Cameroon
	Guatemaia		Sri Lanka		Cape verde
	Honduras	<i></i>			Central African Republic
	Mexico	SAM	Argentina		Chad
	Nicaragua		Bolivia		Congo, Dem. Rep. of the
	Panama		Brazil		Congo, Rep. of the
			Chile		Cote d'Ivoire
CAN	Canada		Colombia		Djibouti
			Ecuador		Equatorial Guinea
CEE	Albania		French Guiana		Gabon
	Bosnia and Herzegovina		Guyana		Gambia, The
	Bulgaria		Paraguay		Ghana
	Croatia		Peru		Guinea
	Hungary		Suriname		Guinea-Bissau
	Macedonia, FYR		Uruguay		Kenva
	Poland		Venezuela		Lesotho
	Bomania		. Inolucia		Liberia
	Slovenia	SEA	Brunei Darussalam		Madagascar
	Sibbenia	SEA	Cambodia		Malagascar
CIII	CI :		L		Malawi
CHI	China K D D D D D		Indonesia		Mali
	Korea, Dem. People's Rep.		Lao People's Dem. Rep.		Mauritania
	Mongolia		Malaysia		Mozambique
			Myanmar (Burma)		Namibia
FSU	Azerbaijan		Papua New Guinea		Niger
	Belarus		Philippines		Nigeria
	Estonia		Singapore		Rwanda
	Georgia		Thailand		Samoa
	Kazakhstan		Vietnam		Senegal
	Kyrgyzstan				Sierra Leone
	Latvia	SIS	Antigua and Barbuda		Somalia
	Lithuania		Bahamas		South Africa
	Moldova		Barbados		Sudan
	Russian Federation		Bermuda		Swaziland
	Taibiotan		Comoros		Tangania United Rep
	Tajikistan Tajikistan		Collioros		Talizania, United Rep.
	1 urkmenistan		Cuba		logo
	Ukraine		Dominica		Uganda
	Uzbekistan		Dominican Republic		Zambia
			Fiji		Zimbabwe
JPK	Japan		French Polynesia		
	Korea, Rep.		Grenada	USA	United States
			Guadeloupe		
MAF	Algeria		Haiti	WEU	Austria
	Egypt		Jamaica		Belgium
	Libyan Arab Jamahiriya		Maldives		Cyprus
	Morocco		Martinique		Denmark
	Tunisia		Mauritius		Finland
			New Caledonia		France
MDE	Iran Islamic Rep		Puerto Bico		Germany
1011/12	Iraa		Reunion		Greece
	Israal		Sao Tomo and Princin-		Icoland
	Iordon		Saus rome and rincipe		Inclored
	Jordan V		Selemen Isla		
	ruwait		Solomon Islands		Italy
	Lebanon		St. Kitts and Nevis		Malta
	Oman		St. Lucia		Netherlands
	Qatar		St. Vincent & Grenadines		Norway
	Saudi Arabia		Tonga		Portugal
	Syrian Arab Rep.		Trinidad and Tobago		Spain
	Turkey		Vanuatu		Sweden
	United Arab Emirates				Switzerland
	West Bank and Gaza				United Kingdom
	Yemen				-

Table V. Regional aggregation of simulated countries; Countries in italic letters are used only in the calibration for future scenarios

Country	γ	Country	γ	Country	γ
Australia	9.87E-06	Bhutan	2.25E-14	Botswana	0.00141
New Zealand	2.54E-05	India	5.40E-05	Burkina Faso	3.79E-05
Belize	4.83E-05	Nepal	2.22E-14	Burundi	2.22E-14
Costa Rica	2.22E-14	Pakistan	5.85E-05	Cameroon	3.56E-14
El Salvador	2.23E-14	Sri Lanka	2.22E-14	Cape Verde	2.22E-14
Guatemala	0.000127	Argentina	2.94E-05	Central African Republic	2.34E-14
Honduras	2 22E-14	Bolivia	2 43E-14	Chad	0.000266
Mexico	1 12E-11	Brazil	3.07E-05	Congo Dem Ben of the	3.01E-14
Nicaragua	2.22E-14	Chile	2.22E 14	Congo, Bon, of the	2.23E 14
Demosra	2.22E-14	Colombia	2.22E-14	Congo, Rep. of the	2.23E-14
Fanama	5.55E-06	Colombia	2.75E-14	Cote d Ivoire	2.22E-14
Canada	5.15E-05	Ecuador	3.29E-14	Djibouti	3.00E-07
Albania	9.51E-08	French Guiana	2.22E-14	Equatorial Guinea	1.39E-09
Bosnia and Herzegovina	6.68E-07	Guyana	4.02E-05	Gabon	2.22E-14
Bulgaria	2.23E-14	Paraguay	2.30E-14	Gambia, The	2.73E-14
Croatia	5.19E-07	Peru	2.22E-14	Ghana	2.22E-14
Hungary	2.22E-14	Suriname	2.38E-14	Guinea	0.00136
Macedonia, FYR	6.19E-07	Uruguay	2.22E-14	Guinea-Bissau	3.63E-06
Poland	2.15E-07	Venezuela	2.22E-14	Kenya	3.62E-06
Romania	1.54E-07	Brunei Darussalam	1.13E-05	Lesotho	2.22E-14
Slovenia	5.95E-07	Cambodia	2.22E-14	Liberia	2.23E-14
China	1.88E-13	Indonesia	2.26E-14	Madagascar	3.96E-14
Korea Dem People's Bep	1 75E-05	Lao People's Dem Bep	7 38E-11	Malawi	4 02E-05
Mongolia	2 22E-14	Malaysia	2 22E-14	Mali	2 22E-14
Azerbaijan	2.22E-14	Myanmar (Burma)	2.22E-14 2.23E-14	Mauritania	0.00018
Release	2.001-03	Baava New Cuizes	1.14E.06	Maaritania	0.00010
Belarus	1 2017 05	Fapua New Guinea	1.14E-00	Mozambique	0.00122
Estonia	1.38E-05	Philippines	2.62E-14	Namibia	2.39E-14
Georgia	6.34E-10	Singapore	1.63E-05	Niger	2.42E-08
Kazakhstan	1.51E-07	Thailand	1.95E-05	Nigeria	9.65 ± -07
Kyrgyzstan	9.61E-10	Vietnam	2.71E-14	Rwanda	2.39E-14
Latvia	2.53E-08	Antigua and Barbuda	0.0383	Samoa	5.82E-14
Lithuania	3.91E-08	Bahamas	2.22E-14	Senegal	2.43E-14
Moldova	0.999	Barbados	2.23E-14	Sierra Leone	2.23E-14
Russian Federation	6.50E-08	Bermuda	0.1	Somalia	3.52E-14
Tajikistan	0.1	Comoros	2.33E-06	South Africa	3.05E-14
Turkmenistan	0.999	Cuba	3.23E-06	Sudan	2.54E-12
Ukraine	0.992	Dominica	0.121	Swaziland	2.22E-14
Uzbekistan	7.05E-05	Dominican Republic	2.22E-14	Tanzania, United Rep.	2.22E-14
Japan	2.22E-14	Fiii	3.03E-05	Togo	7.51E-05
Korea Ben	5.55E-07	French Polynesia	1	Uganda	7.84E-06
Algeria	2 78E-05	Grenada	2 22E-14	Zambia	1.68E-08
Fount	4.00E.06	Cuadalauna	7.22E-14	Zimbahwa	4 99E 14
Egypt Liburg Arch Ismahining	4.00E-00	Guadeloupe	7.23E-00	Zimbabwe	4.2215-14
unyan Arab Jamaniriya	1.10E-UD	Inditi Inconstant	2.22E-14	Ametein	0.000591
MOFOCCO	8.00E-06	Jamaica	2.00E-07	Austria	2.23E-14
Tunisia	2.22E-14	Maldives	2.56E-06	Belgium	6.20E-06
Iran, Islamic Rep.	2.61E-14	Martinique	3.57E-05	Cyprus	2.22E-14
Iraq	5.71E-06	Mauritius	2.25E-14	Denmark	4.27E-14
Israel	2.22E-14	New Caledonia	9.58E-07	Finland	1.34E-05
Jordan	2.22E-14	Puerto Rico	0.0916	France	2.22E-14
Kuwait	2.22E-14	Reunion	6.08E-07	Germany	4.14E-14
Lebanon	2.47E-14	Sao Tome and Principe	2.24E-14	Greece	2.60E-14
Oman	2.22E-14	Seychelles	6.50E-06	Iceland	0.1
Qatar	3.55E-14	Solomon Islands	2.22E-14	Ireland	2.46E-14
- Saudi Arabia	6.05E-06	St. Kitts and Nevis	4.46E-06	Italy	0.00221
Svrian Arab Bep	0.00106	St. Lucia	4.55E-06	Malta	4.08E-08
Furkey	2 20F 14	St. Vincent & Gronadines	2.00E-00	Netherlands	1.01E.04
United Arab E	2.29E-14 7.05E-06	Tongo	2.22E-14	Norman	2 5012 1
United Arab Emirates	1.05E-06	Tonga	2.22E-14	Deter	0.00E-14
west Bank and Gaza	4.98E-07	Irinidad and Tobago	4.14E-06	Portugal	0.00145
Yemen	8.89E-06	Vanuatu	2.24E-14	Spain	4.32E-14
Atghanistan	2.51E-13	Angola	2.22E-14	Sweden	2.22E-14
Bangladesh	2.22E-14	Benin	2.55E-14	Switzerland	1.41E-07
				United Kingdom	2.22E-14

B. Results

Region	country	crop	scenario A	scenario B %	scenario C
ANZ	Australia	cb	-89.051	0.281	-89.054
ANZ	Australia	gro	3.068	-1.181	3.086
ANZ	Australia	ocr	258.820	5.989	258.740
ANZ	Australia	osd	-18.390	2.745	-18.427
ANZ	Australia	pdr	-85.309	-1.553	-85.297
ANZ	Australia	pfb	182.880	0.292	182.880
ANZ	Australia	vf	-3.134	0.070	-3.135
ANZ	Australia	wht	-6.807	0.561	-6.816
ANZ	New-Zealand	gro	-58.936	-3.090	-58.894
ANZ	New-Zealand	ocr	10 807	14.733	318.770
ANZ	New Zealand	b	361 170	4 732	-10.929
ANZ	New-Zealand	vf	-1 905	0.200	-1 908
ANZ	New-Zealand	wht	-63.561	2.122	-63.591
CAM	Costa-Rica	cb	25.270	0.186	25.267
CAM	Costa-Rica	gro	21.692	0.025	21.685
CAM	Costa-Rica	ocr	-79.566	0.076	-79.567
CAM	Costa-Rica	osd	40.841	0.647	40.832
CAM	Costa-Rica	pdr	-15.643	-0.382	-15.630
CAM	Costa-Rica	pfb	32.353	0.408	32.347
CAM	Costa-Rica	vf	-15.201	0.072	-15.202
CAM	Honduras	cb	17.107	-0.001	17.107
CAM	Honduras	gro	0.799	-0.005	0.799
CAM	Honduras	ocr	-24.422	-0.004	-24.422
CAM	Honduras	osu pdr	-34 791	-0.004	-34 795
CAM	Honduras	pui pfb	8 824	-0.003	8 824
CAM	Honduras	vf	-17.955	-0.001	-17.955
CAM	Honduras	wht	28.092	-0.007	28.092
CAM	Mexico	cb	24.030	-0.295	24.030
CAM	Mexico	gro	1.660	0.175	1.660
CAM	Mexico	ocr	-54.276	-0.334	-54.276
CAM	Mexico	osd	2.560	-0.805	2.561
CAM	Mexico	pdr	-29.412	1.197	-29.454
CAM	Mexico	pfb	25.426	-0.597	25.427
CAM	Mexico	VI	-10.925	-0.181	-10.925
CAM	Nicaragua	ch	-20.385	-0.827	-20.383
CAM	Nicaragua	gro	-3 184	-0.053	-3 185
CAM	Nicaragua	ocr	-67.609	0.117	-67.609
CAM	Nicaragua	osd	99.844	0.828	99.842
CAM	Nicaragua	pdr	-66.434	-0.269	-66.424
CAM	Nicaragua	pfb	17.580	0.158	17.580
CAM	Nicaragua	vf	-14.660	0.046	-14.660
CAN	Canada	cb	-62.144	-0.232	-62.140
CAN	Canada	gro	-9.455	0.537	-9.456
CAN	Canada	ocr	-71.060	-0.040	-71.060
CAN	Canada	osa	0.712	-0.571	0.720
CAN	Canada	vf	15 376	-0.087	15 377
CAN	Canada	wht	7.577	-0.262	7.575
CEE	Albania	cb	-100.000	6.247	-100.000
CEE	Albania	gro	-100.000	-0.442	-100.000
CEE	Albania	ocr	151.410	0.283	150.810
CEE	Albania	osd	30.387	1.480	27.249
CEE	Albania	pfb	-100.000	2.842	-100.000
CEE	Albania	vf	131.270	0.481	130.250
CEE	Albania	wht	57.833	-0.581	60.240
CEE	Bulgaria	cb	0.000	0.000	0.000
CEE	Bulgaria	gro	-100.000	-2.240	-100.000
CEE	Bulgaria	ocr	-100.000	3 776	-100.000
CEE	Bulgaria	ndr	142 170	-1.974	147,820
CEE	Bulgaria	րքի	-100.000	16.478	-100.000
CEE	Bulgaria	vf	91.935	0.804	90.057
CEE	Bulgaria	wht	11.483	0.015	12.133
CEE	Croatia	cb	0.000	0.000	0.000
CEE	Croatia	gro	-100.000	-3.305	-100.000
CEE	Croatia	ocr	165.040	0.181	164.880
CEE	Uroatia	osd	-68.189	3.015	-70.785
		continued on n	ext page		

Table VII.: Simulated %-changes in allocated area: 1997 - 2050

Simulated %-changes in allocated area: 1997 - 2050, continued

CEE Croatia γf γg <t< th=""><th>Region</th><th>country</th><th>crop</th><th>scenario A</th><th>scneario B</th><th>scenario C</th></t<>	Region	country	crop	scenario A	scneario B	scenario C
CEE Croatia pfb -100.000 7.806 -100.000 CEE Croatia wht 14.639 0.880 15.987 CEE Hungary gro -100.000 -1.310 -100.000 CEE Hungary gro -115.050 -0.211 17.1700 CEE Hungary odd -151.050 -0.321 1.44.210 CEE Hungary odd -100.000 -2.8780 -100.000 CEE Hungary vft 90.308 -0.132 91.673 CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 162.440 -0.124 162.403 CEE Poland ocr 100.000 -2.702 -100.000 CEE Poland ocr 100.000 -2.702 -100.000 CEE Poland ocr 103.700 -0.287 -100.700 CEE Romania odr 100.000 2.607 </td <td></td> <td></td> <td></td> <td>%</td> <td>%</td> <td>%</td>				%	%	%
CEE Croatia vf 59.323 1.465 58.062 CEE Hungary cb 0.000 0.000 0.000 CEE Hungary ocr 171.600 -0.012 171.730 CEE Hungary ocr 171.600 -0.012 171.730 CEE Hungary pdf 64.805 -0.172 66.556 CEE Poland cr 162.400 -0.124 116.2400 CEE Poland cr 162.400 -0.124 120.000 CEE Poland ocr 162.400 -0.285 139.830 CEE Poland ocr 155.130 -0.285 139.830 CEE Poland vf 139.710 -0.285 139.830 CEE Poland vf 139.700 -0.285 139.830 CEE Romania cor 160.000 2.607 148.190 CEE Romania cor 157.760 -0.100.000 -0.73	CEE	Croatia	pfb	-100.000	7.806	-100.000
CEE Croatia wht 14.639 0.880 15.987 CEE Hungary gro -100.000 -1.310 -100.000 CEE Hungary occ 171.600 -0.012 171.730 CEE Hungary ocd 171.600 -0.012 171.730 CEE Hungary odd 151.950 2.212 144.410 CEE Hungary vft 90.055 -0.131 91.673 CEE Poland cp -100.000 -28.780 -100.000 CEE Poland ocr 162.440 -0.124 162.493 CEE Poland ocr 163.930 -2.025 -139.830 CEE Poland wft 139.710 -0.285 139.830 CEE Romania ocr 153.30 0.170 75.609 CEE Romania off 138.300 -2.066 147.600 CEE Romania off 138.300 -0.073	CEE	Croatia	vf	59.323	1.465	58.062
CEE Hungary cb 0.000 0.000 0.000 CEE Hungary ocr 171.600 -0.012 171.730 CEE Hungary ocr 171.600 -0.012 171.730 CEE Hungary pdr 151.950 2.912 144.210 CEE Hungary wht 25.025 0.761 24.647 CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 162.440 -0.124 -100.000 CEE Poland ocr 130.710 -0.285 139.830 CEE Poland ocr 155.130 0.167 155.090 CEE Romania cor 158.130 0.167 157.760 CEE Romania ocd 100.000 -2002 148.190 CEE Romania pdr 141.090 -2.505 148.190 CEE Romania pdr 163.780 0.000 16	CEE	Croatia	wht	14.639	0.880	15.987
CEE Hungary rro -100.000 -1.310 -100.000 CEE Hungary oct 171.600 -0.012 171.730 CEE Hungary pdf 151.950 2.912 144.210 CEE Hungary pdf 151.950 2.912 144.210 CEE Hungary vf 90.308 -0.132 91.673 CEE Poland cc 162.440 -0.124 162.040 CEE Poland ocr 162.440 -0.124 162.400 CEE Poland ocr 162.440 -0.100.000 2.697 -100.000 CEE Poland vf 139.710 -0.285 139.830 -0.00.00 CEE Romania cb 0.0000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 -100.000 2.697 137.690 124.822<	CEE	Hungary	cb	0.000	0.000	0.000
CEE Hungary Sec. $171,600$ -0.712 $171,700$ CEE Hungary pdb 64.805 -0.170 66.556 CEE Hungary pdb 64.805 -0.170 66.556 CEE Hungary vft 99.308 -0.132 91.673 CEE Poland cb -100.000 2.81 24.647 CEE Poland cb -100.000 2.81 -24.647 CEE Poland ocr 162.440 -0.124 162.490 CEE Poland ocf 139.710 -0.285 139.830 CEE Poland vf 139.710 -0.285 139.830 CEE Romania grd -110.000 -2.772 -100.000 CEE Romania ocr 158.130 0.2697 -100.000 CEE Romania odd -100.000 2.673 148.190 CEE Romania <	CEE	Hungary	gro	-100.000	-1 310	-100.000
CEE Imagary ord 1.1.000 -0.732 1.1.000 CEE Hingary pdt 151.950 2.912 144.210 CEE Hingary pdt 151.950 2.912 167.3 CEE Hingary vf 90.308 0.132 91.673 CEE Poland cb -100.000 1.281.1 -100.000 CEE Poland cc -102.400 -0.124 162.401 -0.124 162.403 CEE Poland ocr 162.400 -0.2702 -100.000 2.702 -100.000 CEE Poland vf 139.710 -0.285 139.830 CEE Poland vf 139.710 -0.285 139.830 CEE Romania cd 141.090 -2.505 148.190 CEE Romania cd 141.900 -2.505 148.190 CEE Romania vf 100.000 -0.000 -0.000 CEE Romania vf 109.205 103.820 CEE	CEE	Uungary	gro	171.600	-1.510	171 720
CLE Hungary osd -100.000 -0.781 -100.000 CEE Hungary pdr 51.950 2.912 14.210 CEE Hungary pdr 64.863 -0.772 66.566 CEE Hungary wht 25.025 0.761 24.647 CEE Poland cr 100.000 2.878 -100.000 2.41 100.000 CEE Poland ocr 162.440 -0.124 162.490 CEE Poland ord 51.970 -0.710 55.090 CEE Romania cb 0.000 -0.733 -100.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania odd -100.000 2.697 -100.000 CEE Romania odd -100.000 2.932 -106.100 CEE Romania odd -100.000 0.332 -100.000	CEE	II uligary	001	100.000	-0.012	100.000
CEE Hungary pdb 151.990 2.912 144.200 CEE Hungary vf 90.308 -0.170 66.556 CEE Hungary vf 90.308 -0.132 91.673 CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 163.903 -1.01 124.047 CEE Poland ocr 163.893 -0.285 130.830 CEE Poland ocr 163.890 -0.285 130.830 CEE Romania gro -100.000 -0.285 130.830 CEE Romania gro -100.000 -0.000 -0.000 CEE Romania gro -100.000 2.697 -100.000 CEE Romania gro -100.000 -2.697 148.190 CEE Romania gro -100.000 0.000 0.000 CEE Slovenia	CEE	Hungary	osa	-100.000	-0.781	-100.000
CEE Hungary ptb 64.805 -0.170 66.535 CEE Hungary vf 90.308 -0.132 91.673 CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 162.440 -0.124 162.440 CEE Poland ocr 162.440 -0.124 162.493 CEE Poland odd 23.893 -1.107 24.337 CEE Poland vf 139.170 -0.285 139.830 CEE Romania ocr 155.290 -0.710 55.090 CEE Romania ocr 158.130 0.157 100.000 CEE Romania ocr 158.130 0.157 100.000 CEE Romania ocr 163.780 -2565 138.790 CEE Slovenia ocr 100.000 -0.716 100.000 CEE Slovenia <	CEE	Hungary	pdr	151.950	2.912	144.210
CEE Hungary vf 90.308 -0.132 91.673 CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 162.400 -0.1241 162.490 CEE Poland ocd 123.833 -1.107 24.337 CEE Poland vf 139.710 -2.855 139.830 CEE Poland vf 139.710 -0.285 139.830 CEE Poland vf 139.710 -0.285 139.830 CEE Romania gro -100.000 -0.773 -100.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania odd -100.000 2.697 -100.000 CEE Romania odd -100.000 0.793 -100.000 CEE Romania odd -100.000 0.793 -100.000 CEE Romania	CEE	Hungary	pfb	64.805	-0.170	66.556
CEE Hungary wht 25.025 0.761 24.647 CEE Poland gro -100.000 1.241 -100.000 CEE Poland ocr 162.440 -0.124 162.493 CEE Poland ocr 162.440 -0.124 162.493 CEE Poland ocr 162.440 -0.124 153.930 CEE Poland vf 139.710 -0.285 139.830 CEE Romania gro -100.000 -0.000 0.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania pdr 141.090 -2.505 148.190 CEE Romania vf 109.520 0.505 108.320 CEE Romania vf 109.000 0.000 0.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia vf 55.125 -0.132 55.	CEE	Hungary	vf	90.308	-0.132	91.673
CEE Poland cb -100.000 -28.780 -100.000 CEE Poland ocr 162.440 -0.124 162.490 CEE Poland ocd 23.893 -1.107 24.337 CEE Poland pfb -100.000 -2.702 -100.000 CEE Poland vf 139.710 -0.285 139.830 CEE Romania cb 0.000 -0.733 -100.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania ocr 109.520 0.505 108.320 CEE Romania vf 109.520 0.505 108.320 CEE Romania vf 109.520 0.62 25.110 CEE Slovenia ocr 163.780 0.017 163.780 CEE Slovenia ocr 163.780 0.173 65.185 CEE Slovenia ocr 163.780 0.174 6	CEE	Hungary	wht	25.025	0.761	24.647
CEE Poland gro -100.000 1.211 -100.000 CEE Poland ocr 162.490 0.124 162.490 CEE Poland pfb -100.000 2.702 -100.000 CEE Poland vf 139.710 -0.285 139.830 CEE Poland wht 55.290 -0.710 55.090 CEE Romania gro -100.000 -0.000 -0.0000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania ocr 158.330 0.296 137.690 CEE Romania wht 24.822 0.662 25.110 CEE Romania ocr 163.780 -0.017 163.780 CEE Slovenia ocr 163.780 -0.132 55.125 CEE Slovenia vf 55.125 -0.132 55.125 CHI China ocr 12.862 0.282 12.2	CEE	Poland	cb	-100.000	-28.780	-100.000
CEE Poland ocr 162,440 -0.124 162,439 CEE Poland pfb -100,000 -2.702 -100,000 CEE Poland vft 139,710 -0.285 139,830 CEE Poland vft 55,229 -0.710 55,000 CEE Romania cb 0.000 -0.0793 -100,000 CEE Romania ocr 158,130 0.157 -100,000 CEE Romania ocd -100,000 2.607 -100,000 CEE Romania pdr 141,090 -2.505 136,890 CEE Romania vft 148,220 0.062 25,110 CEE Slovenia cb 0.000 0.793 -100,000 CEE Slovenia cd -101,000 -0.716 -100.000 CEE Slovenia cd 63,521 -0.122 55,125 CEE Slovenia cd 63,525 0.173	CEE	Poland	gro	-100.000	1.241	-100.000
$ \begin{array}{ccccc} CEE & Poland & ord & 23.893 & -1.107 & 24.337 \\ CEE & Poland & pfb & -100.000 & -2.702 & -100.000 \\ CEE & Poland & wht & 55.229 & -0.710 & 55.090 \\ CEE & Romania & cb & 0.000 & -0.000 & 0.000 \\ CEE & Romania & gro & -100.000 & -0.793 & -100.000 \\ CEE & Romania & ord & -100.000 & 2.607 & -100.000 \\ CEE & Romania & ord & -100.000 & 2.607 & -100.000 \\ CEE & Romania & pdr & 141.090 & -2.505 & 148.190 \\ CEE & Romania & pdr & 138.390 & 0.266 & 137.690 \\ CEE & Romania & wht & 24.822 & 0.062 & 25.110 \\ CEE & Romania & wht & 24.822 & 0.062 & 25.110 \\ CEE & Romania & wht & 24.822 & 0.062 & 25.110 \\ CEE & Slovenia & cb & 0.000 & 0.733 & -100.000 \\ CEE & Slovenia & ord & -100.000 & 0.733 & -100.000 \\ CEE & Slovenia & ord & -100.000 & -0.716 & -100.000 \\ CEE & Slovenia & ord & -100.000 & -0.716 & -100.000 \\ CEE & Slovenia & ord & -100.000 & -0.716 & -100.000 \\ CEE & Slovenia & ord & -100.000 & -0.716 & -100.000 \\ CEE & Slovenia & ord & -102.66 & -63.321 \\ CEE & Slovenia & ord & -19.264 & 0.630 & -20.611 \\ CHI & China & gro & -82.222 & -2.002 & -77.872 \\ CHI & China & ord & -19.264 & 0.630 & -20.611 \\ CHI & China & pdr & -2.672 & 0.78 & -2.928 \\ CHI & China & pdr & -2.672 & 0.078 & -2.928 \\ CHI & China & pdr & -2.672 & 0.078 & -2.928 \\ CHI & China & pdr & -3.374 & 0.968 & -33.161 \\ CHI & China & pdr & -30.774 & 9.87.499 \\ CHI & China & pdr & -30.744 & 0.724 & 38.759 \\ CHI & China & pdr & -30.774 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.874 & 0.958 & -35.161 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.876 & -0.756 & -19.751 \\ CHI & KoreaDemPeople's-Rep. pdr & -30.876 & -0.756 & -19.751 \\ CHI & KoreaDemPeople's-Rep. pdr & 100.000 & 0.000 \\ FSU & Azerbaijan & pdr $	CEE	Poland	ocr	162.440	-0.124	162.490
$ \begin{array}{ccccc} CEE & Poland & pfb & -100.000 & -2.702 & -100.000 \\ CEE & Poland & vft & 53.229 & -0.710 & 55.000 \\ CEE & Romania & cb & 0.000 & 0.000 & 0.000 \\ CEE & Romania & cc & 158.130 & -0.733 & -100.000 \\ CEE & Romania & ocr & 158.130 & -0.733 & -100.000 \\ CEE & Romania & ocr & 158.130 & -0.757 & 157.760 \\ CEE & Romania & pdr & 141.090 & -2.505 & 148.190 \\ CEE & Romania & pdr & 141.090 & -2.505 & 148.190 \\ CEE & Romania & vft & 109.520 & 0.505 & 108.320 \\ CEE & Romania & vft & 109.520 & 0.505 & 108.320 \\ CEE & Romania & ocr & 163.780 & -0.017 & 163.7690 \\ CEE & Romania & ocr & 163.780 & -0.017 & 163.780 \\ CEE & Slovenia & ocr & 163.780 & -0.017 & 163.781 \\ CEE & Slovenia & ocr & 163.780 & -0.017 & 163.321 \\ CEE & Slovenia & ocr & 163.780 & -0.017 & 163.321 \\ CEE & Slovenia & ocr & 12.862 & 0.282 & 12.259 \\ CHI & China & ocr & 12.862 & 0.282 & 12.259 \\ CHI & China & ocr & 12.862 & 0.282 & 12.259 \\ CHI & China & ocr & 12.862 & 0.282 & 12.298 \\ CHI & China & odd & -19.264 & 0.638 & -20.611 \\ CHI & China & odd & -19.264 & 0.638 & -20.611 \\ CHI & China & pdr & -2.672 & 0.078 & -2.928 \\ CHI & China & pdr & -3.842 & 0.439 & -35.161 \\ CHI & China & pdr & -3.874 & 0.439 & -35.161 \\ CHI & China & pdr & -3.874 & 0.437 & 82.545 \\ CHI & China & pdr & -3.842 & 0.437 & 82.545 \\ CHI & China & pdr & -3.842 & 0.437 & 82.545 \\ CHI & Korea, DemPeople's-Rep, pdr & -20.876 & -0.756 & -19.751 \\ CHI & Korea, DemPeople's-Rep, pdr & -20.876 & 0.075 & -151.230 \\ CHI & Korea, DemPeople's-Rep, wht & 4.763 & -0.051 & 4.865 \\ FSU & Azerbaijan & pdr & 0.000 & 0.000 \\ FSU & Azerbaijan & pdr & 0.000 & 0.000 \\ FSU & Azerbaijan & pdr & 0.000 & 0.000 \\ FSU & Azerbaijan & pdr & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 135.310 & 1.244 & 133.110 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 \\ FSU & Kazakhstan & pdr & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 \\ FSU & Kazakhstan & cr & 0.000 & 0.000 \\ FSU$	CEE	Poland	osd	23 893	-1 107	24 337
CEE Polanti ph 100 000 2.02 100 300 CEE Poland wh 55.229 -0.710 55.090 CEE Romania cb 0.000 -0.028 139.830 CEE Romania cr 158.130 0.157 157.760 CEE Romania ocr 158.130 0.157 157.760 CEE Romania ocd -100.000 2.607 -100.000 CEE Romania pdb 138.390 0.266 137.690 CEE Romania wh 24.822 0.062 25.110 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia ocr 163.720 -0.017 163.783 CEE Slovenia vf 55.125 0.132 55.125 CEE Slovenia vf 65.555 0.173 65.185 CHI China cb 65.552 0.153 45.123	CEE	Poland	nfb	100.000	2 702	100.000
CEE Foland vir 159-110 -0.285 159-830 CEE Romania cb 0.000 0.000 0.000 CEE Romania gro -100.000 0.000 0.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania odd -100.000 2.667 -100.000 CEE Romania pdr 141.090 -2.505 148.190 CEE Romania vf 109.520 0.505 108.320 CEE Romania wht 24.82 0.062 25.110 CEE Slovenia gro -100.000 0.703 -100.000 CEE Slovenia wht 63.5125 -0.132 55.125 CHI China ocr 12.862 0.282 12.2612 CHI China ocr 12.862 0.281 12.2651 CHI China ocr 12.862 0.281 12.2651 </td <td>CEE</td> <td>Delend</td> <td>pib</td> <td>120.710</td> <td>-2.102</td> <td>120.820</td>	CEE	Delend	pib	120.710	-2.102	120.820
CEE Poinad wht 55.229 -0.110 50.3090 CEE Romania cb 0.000 0.000 0.000 CEE Romania ord 158.130 0.157 157.760 CEE Romania pdf 141.090 -2.555 148.190 CEE Romania pdf 138.390 0.296 137.690 CEE Romania wht 24.822 0.062 5.555 108.320 CEE Slovenia cb 0.000 0.000 0.000 0.000 CEE Slovenia ord 133.390 -0.17 163.780 CEE Slovenia wht 24.822 -0.200 -7.7872 CHI China ord 12.862 0.202 -7.7872 CHI China ord 19.2844 0.630 -20.611 CHI China ord 19.7952 0.212 37.499 CHI	CEE	Poland D. L. L	VI	159.710	-0.285	139.830
CEE Romania cb 0.000 0.000 0.000 CEE Romania ocr 158.130 0.157 157.760 CEE Romania ocr 158.130 0.157 157.760 CEE Romania pdr 141.090 -2.505 148.190 CEE Romania vf 109.520 0.505 108.320 CEE Romania vf 109.520 0.505 108.320 CEE Romania vf 109.520 0.505 108.320 CEE Slovenia cb 0.000 0.793 -100.000 CEE Slovenia ocr 163.780 -0.017 63.783 CHI China gro -0.266 -63.321 -0.256 -63.321 CHI China gro -8.222 -0.017 63.785 CHI China gro -8.222 -0.078 -2.228 CHI China gro -2.0217 -0.756	CEE	Poland	wht	55.229	-0.710	55.090
CEE Romania ord -100.000 -0.793 -100.000 CEE Romania ord -100.000 2.697 -100.000 CEE Romania pdf 141.090 -2.505 148.190 CEE Romania pdf 109.520 0.505 108.320 CEE Romania wht 24.822 0.062 25.110 CEE Slovenia gro -100.000 0.000 0.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia wht -63.321 -0.256 -63.321 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -12.862 0.202 -77.7872 CHI China ocr 12.862 0.2266 -33.21 CHI China pdf -2.672 0.078 -2.928 CHI China pdf -4.87.952 0.212 <	CEE	Romania	cb	0.000	0.000	0.000
CEE Romania ocr 158,130 0.157 157.760 CEE Romania pdr 141.090 2.505 148.190 CEE Romania pdf 141.090 2.505 148.190 CEE Romania vf 109.520 0.505 108.320 CEE Romania vf 109.520 0.6062 25.110 CEE Slovenia ocr 163.780 -0.0171 163.780 CEE Slovenia ocd 100.000 0.733 -51.125 CEE Slovenia vh 453.321 -0.256 -63.321 CHI China cb 65.555 0.173 65.185 CHI China ocr 12.862 0.282 12.259 CHI China ocf 19.264 0.382 12.259 CHI China pdf -2.928 0.4161 0.778 -2.928 CHI China pdf	CEE	Romania	gro	-100.000	-0.793	-100.000
CEE Romania pdf 141.090 2.697 -100.000 CEE Romania pdf 138.390 0.296 137.690 CEE Romania vf 109.520 0.505 148.190 CEE Romania vht 24.822 0.062 25.110 CEE Slovenia gro -100.000 0.793 -100.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia vf 55.125 -0.132 65.125 -100.000 CEE Slovenia vf 55.125 -0.132 65.185 CHI China cr 2.222 -2.002 -77.872 CHI China ocr 12.862 0.630 -22.611 CHI China pdf -2.477 0.775 -2.928 CHI China vf 87.752 0.212 87.499 CHI China	CEE	Romania	ocr	158.130	0.157	157.760
CEE Romania pdr 141.090 -2.505 148.190 CEE Romania pfb 183.390 0.296 137.690 CEE Romania wht 24.822 0.062 25.110 CEE Slovenia cb 0.000 0.000 0.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia osd -100.000 -0.733 -100.000 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -82.222 -2.002 -77.872 CHI China ocr 1.264 0.630 -20.611 CHI China pfb 49.846 0.318 49.167 CHI China pfb 49.846 0.453 -54.203 CHI China vf 87.952 0.212 87.499 CHI China vf 87.952 0.212 87.499 <	CEE	Romania	osd	-100.000	2.697	-100.000
CEE Romania rfb 138.390 0.296 137.690 CEE Romania vh 24.822 0.062 25.110 CEE Slovenia gr -100.000 0.793 -100.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia ocr 163.780 -0.017 61.0000 CEE Slovenia vf 55.125 -0.132 55.125 CHI China gr -222 -2.002 -77.872 CHI China ocr 12.862 0.282 -2.002 -77.872 CHI China ocr 12.862 0.212 87.499 CHI China off 87.982 0.212 87.499 CHI China vf 53.174 0.958 -35.161 CHI China vf 84.323 0.437 82.423 CHI China vf 43.423 0.437 82	CEE	Romania	pdr	141.090	-2.505	148.190
CEE Romania vf 100.520 0.505 108.320 CEE Romania wht 24.822 0.062 25.110 CEE Slovenia cb 0.000 0.000 0.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia ocf 153.780 -0.017 163.780 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -82.222 -2.002 -77.872 CHI China ocr 12.862 0.282 12.259 CHI China ocf +9.264 0.630 -20.611 CHI China ocf -0.075 -1.9.751	CEE	Romania	pfb	138.390	0.296	137.690
CEE Romania wht 24.822 0.002 25.110 CEE Slovenia gro -100.000 0.000 0.000 CEE Slovenia gro -100.000 0.793 -100.000 CEE Slovenia ocr 163.780 -0.176 -100.000 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro $+2.222$ -2.002 -77.872 CHI China ocr 12.642 0.630 -20.611 CHI China pfb 49.846 0.318 49.167 CHI China pfb 49.846 0.318 49.167 CHI China wht -33.174 0.958 -35.161 CHI China wht -33.174 0.958 -35.161 CHI Korea, DemPeople's-Rep. pdr -20.876 -0.753 -19.751 CHI Korea, DemP	CEE	Bomania	vf	109 520	0.505	108 320
CEE Slovenia cb 0.002 0.002 0.000 0.000 CEE Slovenia or 100.000 0.793 -100.000 CEE Slovenia ord 163.780 -0.017 163.780 CEE Slovenia vf 55.125 -0.132 55.125 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -82.222 -2.002 -77.872 CHI China ocf 19.264 0.630 -20.611 CHI China ocf -19.264 0.630 -20.611 CHI China ocf -9.262 0.788 -35.161 CHI China vf 87.952 0.212 87.499 CHI China vf 87.952 0.212 87.499 CHI Korea, DemPeople's-Rep. grd -20.876 -0.756 -19.751 CHI	CEE	Romania	wht	24 822	0.062	25.110
CEE Slovenia Cb 0.000 0.000 0.000 CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia osd 100.000 -0.176 -100.000 CEE Slovenia wh -63.321 -0.256 -63.321 CHI China cb 65.555 0.173 65.385 CHI China ord -22.222 -2.002 -77.872 CHI China ord -2672 0.078 -2.928 CHI China pfb 49.846 0.318 49.167 CHI China pfb 49.846 0.318 49.167 CHI China pfb 40.846 0.318 49.167 CHI China pfb 40.243 0.4758 -35.161 CHI Korea, DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea, DemPeople's-Rep.	CEE	Romania	witt	24.022	0.002	20.110
CEE Slovenia gro -100.000 0.793 -100.000 CEE Slovenia ord 163.780 -0.017 163.780 CEE Slovenia vf 55.125 -0.132 55.125 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China cb 65.555 0.173 65.185 CHI China ocr 12.862 0.282 12.259 CHI China ocr 12.862 0.282 12.259 CHI China pdr -2.672 0.078 -2.928 CHI China pfb 49.846 0.318 49.167 CHI China wht -33.174 0.958 -35.403 CHI Korea, -DemPeople's-Rep. pfb 40.243 0.744 38.788 CHI Korea, -DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Korea, -DemPeople's-Rep. vf 120.560	CEE	Slovenia	CD	0.000	0.000	0.000
CEE Slovenia ocr 163.780 -0.017 163.780 CEE Slovenia vf 55.125 -0.132 55.125 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China cb 65.555 0.173 65.185 CHI China ocr 12.862 0.222 -2.002 -77.872 CHI China ord -2.672 0.022 -77.872 CHI China pfb 49.846 0.318 49.167 CHI China vf 87.952 0.212 87.499 CHI China vf 87.952 0.212 87.499 CHI Korea, -DemPeople's-Rep. gro -53.766 -0.756 -19.751 CHI Korea, -DemPeople's-Rep. off 40.243 0.7724 38.788 CHI Korea, -DemPeople's-Rep. vf 120.560 0.018 120.530	CEE	Slovenia	gro	-100.000	0.793	-100.000
CEE Slovenia osd -100.000 -0.716 -100.000 CEE Slovenia vf 55.125 -0.132 55.125 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China cb 65.555 0.173 65.185 CHI China ocr 12.862 0.282 12.259 CHI China ocr 12.862 0.630 -2.061 CHI China pdr -2.672 0.078 -2.928 CHI China pdr -2.672 0.078 -2.928 CHI China wht -33.174 0.958 -35.161 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.153 -54.203 CHI Korea,-DemPeople's-Rep. pfd 40.243 0.724 38.785 CHI Korea,-DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Morgolia vf 120.560	CEE	Slovenia	ocr	163.780	-0.017	163.780
CEE Slovenia vf 55.125 -0.132 55.125 CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -82.222 -2.002 -77.872 CHI China ocr 12.862 0.282 12.259 CHI China osd -19.264 0.630 -20.611 CHI China pdr -2.672 0.078 -2.928 CHI China pfb 49.846 0.318 49.167 CHI China vf 87.952 0.212 87.499 CHI Korea,-DemPeople's-Rep. gro -35.161 54.203 0.459 34.559 CHI Korea,-DemPeople's-Rep. pdr -2.0876 -0.756 -9.751 CHI Korea,-DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Korea,-DemPeople's-Rep. vf 120.560 0.018 120.530 CHI Mongolia	CEE	Slovenia	osd	-100.000	-0.716	-100.000
CEE Slovenia wht -63.321 -0.256 -63.321 CHI China gro -82.222 -2.002 -77.872 CHI China ocr 12.862 0.282 12.259 CHI China osd -19.264 0.630 -20.611 CHI China pdf 49.846 0.318 49.167 CHI China pfb 49.846 0.318 49.167 CHI China vf 87.952 0.212 87.499 CHI Korea,-DemPeople's-Rep. gro -35.4765 -0.153 -54.203 CHI Korea,-DemPeople's-Rep. pdf -0.0876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. pf 40.243 0.437 82.545 CHI Korea,-DemPeople's-Rep. vf 120.560 0.018 120.530 CHI Morgolia wht 4.763 -0.051 4.865 FSU Azerbaijan ocr	CEE	Slovenia	vf	55.125	-0.132	55.125
CHI China cb 65.555 0.173 65.185 CHI China ocr 12.862 -2.002 -77.872 CHI China ocr 12.862 0.282 12.259 CHI China pdr -2.672 0.078 -2.928 CHI China pdr -2.672 0.078 -2.928 CHI China pdr -7675 0.153 -54.203 CHI Korea, DemPeople's-Rep. gro -54.765 -0.153 -54.203 CHI Korea, DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea, DemPeople's-Rep. pfb 40.243 0.724 38.788 CHI Korea, DemPeople's-Rep. vf 53.422 0.227 -40.334 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia vf 0.000 0.000 0.000 <td< td=""><td>CEE</td><td>Slovenia</td><td>wht</td><td>-63.321</td><td>-0.256</td><td>-63.321</td></td<>	CEE	Slovenia	wht	-63.321	-0.256	-63.321
CHI China gro -82.222 -2.002 -77.872 CHI China ocr 12.862 0.282 12.259 CHI China pdr -2.672 0.078 -2.928 CHI China pdr -2.672 0.078 -2.928 CHI China pdr 48.46 0.318 49.167 CHI China wht -33.174 0.958 -35.161 CHI Korea, DemPeople's-Rep. gro -354.765 -0.153 -54.203 CHI Korea, DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea, DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Korea, DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia vf 120.560 0.000 0.000	CHI	China	cb	65.555	0.173	65.185
CHI China ocr 12.862 0.282 12.259 CHI China odd -19.264 0.630 -20.611 CHI China pdr -2.672 0.078 -2.928 CHI China pfb 49.846 0.318 49.167 CHI China vf 87.952 0.212 87.499 CHI China wht -33.174 0.958 -35.161 CHI Korea, DemPeople's-Rep. gro -54.765 -0.153 -54.203 CHI Korea, DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea, DemPeople's-Rep. vf 43.423 0.437 82.545 CHI Korea, DemPeople's-Rep. wht -58.774 0.989 -60.775 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia vf 0.000 0.000 0.000 FSU Azerbaijan pdr <t< td=""><td>CHI</td><td>China</td><td>gro</td><td>-82.222</td><td>-2.002</td><td>-77.872</td></t<>	CHI	China	gro	-82.222	-2.002	-77.872
CHI China Ord 19.264 0.632 -19.264 CHI China pdr -2.672 0.078 -2.928 CHI China pfb 49.846 0.318 49.167 CHI China vf 87.952 0.212 87.499 CHI China wht -33.174 0.958 -35.161 CHI Korea,-DemPeople's-Rep. gro -54.765 -0.153 -54.203 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. vf 8.423 0.437 82.545 CHI Korea,-DemPeople's-Rep. vf 120.560 0.018 120.530 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia vf 0.000 0.000 0.000 FSU Azerbaijan <td< td=""><td>CHI</td><td>China</td><td>000</td><td>12.862</td><td>0.282</td><td>12 259</td></td<>	CHI	China	000	12.862	0.282	12 259
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CHI	China	ord	10.264	0.630	20.611
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	CIII	China	- da	-13.204	0.030	-20.011
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	CHI	China	par	-2.072	0.078	-2.920
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	CHI	China	pip	49.846	0.318	49.167
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	CHI	China	vt	87.952	0.212	87.499
CHI Korea,-DemPeople's-Rep. gro -54.765 -0.153 -54.203 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Korea,-DemPeople's-Rep. vf -58.774 0.989 -60.775 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia vf 120.560 0.000 0.000 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000	CHI	China	wht	-33.174	0.958	-35.161
CHI Korea,-DemPeople's-Rep. ocr 35.482 0.459 34.559 CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. pdf 40.243 0.724 38.788 CHI Korea,-DemPeople's-Rep. wht 58.774 0.989 -60.775 CHI Mongolia yf 120.560 0.018 120.530 CHI Mongolia wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pdf 0.000 0.000 0.000 FSU Azerbaijan pdf 0.000 0.000 0.000 FSU Azerbaijan wh 0.000 0.000 0.000 FSU Kazakhstan cf 148.560 -0.875 151.230	CHI	Korea,-DemPeople's-Rep.	gro	-54.765	-0.153	-54.203
CHI Korea,-DemPeople's-Rep. pdr -20.876 -0.756 -19.751 CHI Korea,-DemPeople's-Rep. pfb 40.243 0.724 38.788 CHI Korea,-DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Mongolia gro -39.882 0.227 -40.334 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan ocf 133.310 -1.244 139.110	CHI	Korea,-DemPeople's-Rep.	ocr	35.482	0.459	34.559
CHI Korea,-DemPeople's-Rep. pfb 40.243 0.724 38.788 CHI Korea,-DemPeople's-Rep. vf 83.423 0.437 82.545 CHI Korea,-DemPeople's-Rep. wht -58.774 0.989 -60.775 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 148.560 -0.875 151.230 FSU Kazakhstan ocr 135.10 -1.244 139.110	CHI	Korea,-DemPeople's-Rep.	pdr	-20.876	-0.756	-19.751
CHIKorea, -DemPeople's-Rep. vfvf 83.423 0.437 82.545 CHIKorea, -DemPeople's-Rep.wht -58.774 0.989 -60.775 CHIMongoliagro -39.882 0.227 -40.334 CHIMongoliawht 4.763 -0.051 4.865 FSUAzerbaijangro 0.000 0.000 0.000 FSUAzerbaijanocr 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanvf 0.000 0.000 0.000 FSUAzerbaijanvf 0.000 0.000 0.000 FSUKazakhstancb 148.560 -0.875 151.230 FSUKazakhstangro -35.471 0.362 -34.838 FSUKazakhstanpdr 166.920 2.218 160.860 FSUKazakhstanpdr 166.920 2.218 160.860 FSUKazakhstanpdr 166.920 0.000 0.000 FSUKazakhstanvf 172.820 -0.200 173.430 FSUKazakhstanpdr 0.000 0.000 0.000 FSUKazakhstanvf 172.820 -0.200 173.430 FSUKazakhstanvf 172.820 -0.200 173.430 FSUKyrgyzstancb 0.000	CHI	KoreaDemPeople's-Rep.	pfb	40.243	0.724	38.788
CHIKorea, Dem. People's-Rep.wht-58.7740.989-60.775CHIMongoliayf120.5600.018120.530CHIMongoliawf120.5600.018120.530CHIMongoliawht4.763-0.0514.865FSUAzerbaijangro0.0000.0000.000FSUAzerbaijanpdr0.0000.0000.000FSUAzerbaijanpdr0.0000.0000.000FSUAzerbaijanpdr0.0000.0000.000FSUAzerbaijanvf0.0000.0000.000FSUAzerbaijanvf0.0000.0000.000FSUKazakhstangro-35.4710.362-34.838FSUKazakhstanocr135.10-1.244139.110FSUKazakhstanpdr166.9202.218160.860FSUKazakhstanpdr166.920-0.200173.430FSUKazakhstanvf172.820-0.200173.430FSUKazakhstanvf0.0000.0000.000FSUKyrgyzstanccr0.0000.0000.000FSUKyrgyzstanpdr0.0000.0000.000FSUKyrgyzstanpdr0.0000.0000.000FSUKyrgyzstanpdr0.0000.0000.000FSUKyrgyzstanpdr0.0000.0000.000FSUKyrgy	CHI	Korea -Dem -People's-Bep	vf	83 423	0.437	82 545
CHIMongoliawht $-0.0.174$ 0303 $-0.0.175$ CHIMongoliavf 120.560 0.018 120.530 CHIMongoliawht 4.763 -0.051 4.865 FSUAzerbaijangro 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanpdr 0.000 0.000 0.000 FSUAzerbaijanvf 0.000 0.000 0.000 FSUAzerbaijanwht 0.000 0.000 0.000 FSUKazakhstancb 148.560 -0.875 151.230 FSUKazakhstancr 135.310 -1.244 139.110 FSUKazakhstanocr 135.310 -1.244 139.110 FSUKazakhstanpdr 166.920 2.218 160.860 FSUKazakhstanvf 172.820 -0.200 173.430 FSUKazakhstanvf 0.000 0.000 0.000 FSUKyrgyzstancb 0.000 0.000 0.000 FSUKyrgyzstanpdr 0.000 0.000 0.000 FSUKyrgyzstanvf 0.000 0.000 0.000 FSUKyrgyzstanpdr 0.000 0.000 0.000 FSU <td>CHI</td> <td>Korea, Dem People's Bep</td> <td>wht</td> <td>58 774</td> <td>0.980</td> <td>60 775</td>	CHI	Korea, Dem People's Bep	wht	58 774	0.980	60 775
CHI Mongolia gro -39.882 0.227 -40.334 CHI Mongolia vf 120.560 0.018 120.530 CHI Mongolia wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pfb 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 135.310 -1.244 139.110 FSU Kazakhstan pdr 166.920 2.218 160.860 FSU Kazakhstan	CIII	Manaplia	W III	-00.114	0.303	40.224
CHI Mongona VI 120.360 0.018 120.330 CHI Mongolia wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pdf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan wht 0.000 0.000 0.000 FSU Azerbaijan wht 0.000 0.000 0.000 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 135.310 -1.244 139.110 FSU Kazakhstan pdr 166.920 2.218 160.860 FSU Kazakhstan pfb 0.000 0.000 0.000 FSU Kazakhstan	CHI	Mongona	gro	-39.002	0.227	-40.334
CHI Mongoha wht 4.763 -0.051 4.865 FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pfb 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vht 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 135.310 -1.244 139.110 FSU Kazakhstan pdf 166.920 2.218 160.860 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU Kyzgyztan	CHI	Mongolia	VI	120.560	0.018	120.530
FSU Azerbaijan gro 0.000 0.000 0.000 FSU Azerbaijan ocr 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pfb 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan wht 0.000 0.000 0.000 FSU Azerbaijan wht 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 100.000 -59.859 -100.000 FSU Kazakhstan pdr 166.920 2.218 160.860 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU	CHI	Mongolia	wht	4.763	-0.051	4.865
FSU Azerbaijan ocr 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan wh 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan gro -35.471 0.362 -34.838 FSU Kazakhstan ocr 135.310 -1.244 139.110 FSU Kazakhstan pdr 166.920 2.218 160.860 FSU Kazakhstan pdr 172.820 -0.200 173.430 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU Kyrgyzstan gro 0.000 0.000 0.000 FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU	FSU	Azerbaijan	gro	0.000	0.000	0.000
FSU Azerbaijan pdr 0.000 0.000 0.000 FSU Azerbaijan pfb 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan vf 0.000 0.000 0.000 FSU Azerbaijan wht 0.000 0.000 0.000 FSU Kazakhstan cb 148.560 -0.875 151.230 FSU Kazakhstan ocr 135.310 -1.244 139.110 FSU Kazakhstan odd -100.000 -59.859 -100.000 FSU Kazakhstan pdr 166.920 2.218 160.860 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU Kazakhstan wht 0.000 0.000 0.000 FSU Kyzgyztan cb 0.000 0.000 0.000 FSU Kyrgyztan pdr 0.000 0.000 0.000 FSU <td< td=""><td>FSU</td><td>Azerbaijan</td><td>ocr</td><td>0.000</td><td>0.000</td><td>0.000</td></td<>	FSU	Azerbaijan	ocr	0.000	0.000	0.000
FSUAzerbaijanpfb 0.000 0.000 0.000 FSUAzerbaijanvf 0.000 0.000 0.000 FSUAzerbaijanwht 0.000 0.000 0.000 FSUKazakhstancb 148.560 -0.875 151.230 FSUKazakhstangro -35.471 0.362 -34.838 FSUKazakhstanocr 135.310 -1.244 139.110 FSUKazakhstanpdr 166.920 2.218 160.860 FSUKazakhstanpdr 172.820 -0.200 173.430 FSUKazakhstanwht 0.000 0.000 0.000 FSUKazakhstanvf 172.820 -0.200 173.430 FSUKazakhstanvf 0.000 0.000 0.000 FSUKyrgyzstancb 0.000 0.000 0.000 FSUKyrgyzstanpdr 0.000 0.000 0.000 FSUKyrgyzstanpdr 0.000 0.000 0.000 FSUKyrgyzstanpdr 0.000 0.000 0.000 FSUKyrgyzstanvf 0.000 0.000 0.000 FSURussian-Federationcb 111.790 -0.130 109.760 FSURussian-Federationcc -100.000 -0.597 -100.000 FSURussian-Federationocr -100.000 -0.597 -100.000 FSURussian-Federationocd 0.000 <td< td=""><td>FSU</td><td>Azerbaijan</td><td>pdr</td><td>0.000</td><td>0.000</td><td>0.000</td></td<>	FSU	Azerbaijan	pdr	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Azerbaijan	pfb	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Azerbaijan	vf	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Azerbaijan	wht	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	ch	148 560	-0.875	151 230
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kagakhatan	CD mo	25 471	0.262	24 929
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazaklistali	gro	125 210	1.944	-34.838
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	ocr	135.310	-1.244	139.110
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	osd	-100.000	-59.859	-100.000
FSU Kazakhstan pfb 0.000 0.000 0.000 FSU Kazakhstan vf 172.820 -0.200 173.430 FSU Kazakhstan wh 0.000 0.000 0.000 FSU Kazakhstan wh 0.000 0.000 0.000 FSU Kyrgyzstan gro 0.000 0.000 0.000 FSU Kyrgyzstan ocr 0.000 0.000 0.000 FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU Kyrgyzstan pdf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation <td>FSU</td> <td>Kazakhstan</td> <td>pdr</td> <td>166.920</td> <td>2.218</td> <td>160.860</td>	FSU	Kazakhstan	pdr	166.920	2.218	160.860
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	pfb	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	vf	172.820	-0.200	173.430
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	Kazakhstan	wht	0.000	0.000	0.000
FSU Kyrgyzstan gro 0.000 0.000 0.000 FSU Kyrgyzstan ocr 0.000 0.000 0.000 FSU Kyrgyzstan ocr 0.000 0.000 0.000 FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU Kyrgyzstan pfb 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -0.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation osd	FSU	Kyrgyzstan	cb	0.000	0.000	0.000
FSU Kyrgyzstan orc 0.000 0.000 0.000 FSU Kyrgyzstan ocr 0.000 0.000 0.000 FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU Kyrgyzstan pfb 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Kyrgyzstan	gro	0.000	0.000	0.000
FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU Kyrgyzstan pfb 0.000 0.000 0.000 FSU Kyrgyzstan pfb 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Kyrgyzstan	0.00	0.000	0.000	0.000
FSU Kyrgyzstan pdr 0.000 0.000 0.000 FSU Kyrgyzstan pfb 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan wht 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	T D U	Kungugatan	nd-	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	FSU	nyrgyzstan	pdr	0.000	0.000	0.000
FSU Kyrgyzstan vf 0.000 0.000 0.000 FSU Kyrgyzstan wht 0.000 0.000 0.000 FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation osd 0.000 -4.223 64.027 FSU Russian-Federation performance -4.223 64.027	FSU	nyrgyzstan	pip	0.000	0.000	0.000
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	FSU	Kyrgyzstan	vŕ	0.000	0.000	0.000
FSU Russian-Federation cb 111.790 -0.130 109.760 FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Kyrgyzstan	wht	0.000	0.000	0.000
FSU Russian-Federation gro -100.000 0.702 -100.000 FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Russian-Federation	cb	111.790	-0.130	109.760
FSU Russian-Federation ocr -100.000 -0.597 -100.000 FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Russian-Federation	gro	-100.000	0.702	-100.000
FSU Russian-Federation osd 0.000 0.000 0.000 FSU Russian-Federation pdr 56.159 -4.223 64.027 continued on pert page	FSU	Russian-Federation	ocr	-100.000	-0.597	-100.000
FSU Russian-Federation pdr 56.159 -4.223 64.027	FSU	Russian-Federation	osd	0.000	0.000	0.000
continued on next name	FSU	Russian-Federation	ndr	56 159	-4 223	64 027
A A A A A A A A A A A A A A A A A A A	1.00	continu	ued on n	evt page	1.220	01.041

Simulated %-changes in allocated area: 1997 - 2050,	continued
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Region	country	crop	scenario A	scneario B	scenario C
EGII	Duration Federation	fL	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	0.000	<u>%</u>
FSU	Russian-Federation	pro	162 780	0.000	162 200
FSU	Russian Federation	vi	0.000	-0.031	0.000
FSU	Tajikistan	gro	0.007	0.000	0.007
FSU	Tajikistan	ocr	0.021	0.000	0.021
FSU	Tajikistan	pdr	0.034	-0.001	0.035
FSU	Tajikistan	pfb	-0.001	0.000	-0.001
FSU	Tajikistan	vf	0.076	0.000	0.076
FSU	Tajikistan	wht	0.000	0.000	0.000
FSU	Turkmenistan	gro	0.000	0.000	0.000
FSU	Turkmenistan	ocr	0.002	0.000	0.002
FSU	Turkmenistan	pdr	0.001	0.000	0.001
FSU	Turkmenistan	pfb	0.000	0.000	0.000
FSU	Turkmenistan	$\mathbf{v}\mathbf{f}$	0.007	0.000	0.007
FSU	Turkmenistan	wht	0.000	0.000	0.000
FSU	Ukraine	cb	0.003	0.000	0.003
FSU	Ukraine	gro	0.001	0.000	0.001
FSU	Ukraine	ocr	0.003	0.000	0.003
FSU	Ukraine	osd	0.001	0.000	0.001
FSU	Ukraine	pdr	0.003	0.000	0.003
FSU	Ukraine	$_{\rm pfb}$	0.000	0.000	0.000
FSU	Ukraine	vf	0.012	0.000	0.012
FSU	Ukraine	wht	0.000	0.000	0.000
FSU	Uzbekistan	cb	10.816	0.011	10.784
FSU	Uzbekistan	gro	1.611	-0.050	1.751
FSU	Uzbekistan	ocr	10.698	0.011	10.667
FSU	Uzbekistan	osd	2.497	0.012	2.464
FSU	Uzbekistan	par	12.055	-0.192	12.594
FSU	Uzbekistan	pib	-1.460	0.012	-1.494
FSU	Uzbekistan	vi	62.157	0.008	62.135
IDV	Uzbekistan	witt	-0.292	-0.014	-0.205
JFK	Japan	CD	-4.440	0.008	-4.400
JI K IDV	Japan	gro	23.300	0.874	23.402
JI K IPK	Japan	ord	79.005	0.203	78 078
IPK	Japan	osu pdr	20.238	0.029	30.257
IPK	Japan	pti	0.000	0.000	0.000
JPK	Japan	vf	46 281	0.000	46 269
JPK	Japan	wht	23 975	0.525	24 209
JPK	Korea -Ben	gro	15 424	0.076	15 733
JPK	KoreaRep.	ocr	35.636	0.228	35.596
JPK	KoreaRep.	osd	108.130	1.180	107.920
JPK	KoreaRep.	pdr	-63.303	-0.385	-63.391
JPK	KoreaRep.	pfb	0.000	0.000	0.000
JPK	KoreaRep.	vf	51.521	0.254	51.476
JPK	Korea,-Rep.	wht	26.568	0.581	26.718
MAF	Egypt	cb	36.051	0.379	35.590
MAF	Egypt	gro	-81.411	-1.338	-80.532
MAF	Egypt	ocr	8.733	2.162	6.104
MAF	Egypt	osd	-49.030	1.704	-51.101
MAF	Egypt	pdr	1.184	-0.745	2.291
MAF	Egypt	pfb	166.600	1.674	164.570
MAF	Egypt	$\mathbf{v}\mathbf{f}$	44.417	0.256	44.106
MAF	Egypt	wht	-100.000	0.980	-100.000
MAF	Morocco	$^{\rm cb}$	44.535	0.001	44.534
MAF	Morocco	gro	4.818	0.003	4.814
MAF	Morocco	ocr	62.633	0.001	62.631
MAF	Morocco	osd	23.381	0.002	23.379
MAF	Morocco	pdr	26.918	-1.148	28.475
MAF	Morocco	pfb	125.840	0.001	125.840
MAF	Morocco	vt	49.231	0.001	49.230
MAF	Morocco	wht	-21.087	0.003	-21.091
MAD	1 unisia	CD	48.596	0.020	48.591
MAD	1 unisia	gro	1.(80	0.174	1.(42
MAE	1 unisia Tunicia	ocr	20.020	0.085	00.998 04 149
MAE	Tunisia	OSCI fL	24.109 101 650	0.080	24.148 191.690
MAF	Tunisia	pid f	121.000	0.081	121.030
MAE	Tunisia	VI wht	40.444 29 477	0.045	40.400
MDF	Iran Islamia Dor	wnt	-34.477	-0.129	-02.444 193.900
MDE	Iran Islamic Rep.	CD	223.290	0.050	-33 567
MDE	Iran Islamic Rep.	gro	110 850	0.001	110 740
MDE	Iran -Islamic-Rep.	osd	-100.000	0.193	-100.000
MDE	IranIslamic-Rep	ndr	135 450	2.028	129,810
MDE	Iran,-Islamic-Rep	nfb	-72,689	0,156	-73,107
	,	continued on n	ext page	0.100	

Simulated	%-changes	in	allocated	area:	1997 -	2050,	continue
 Region	country				crop	sce	nario A

Region country crop scenario A scenario B scenario C MDE Iran, Islamic-Rep. vit 148.860 0.016 148.820 MDE Syrian-Arab-Rep. cb 108.250 0.006 108.230 MDE Syrian-Arab-Rep. cor 1.45.132 0.018 1.5.603 MDE Syrian-Arab-Rep. ord 1.09.00 0.006 109.800 MDE Syrian-Arab-Rep. vft 1.24.290 0.0016 1.46.949 MDE Syrian-Arab-Rep. vft 1.24.290 0.010 1.10.150 MDE Turkey gro -43.733 0.311 -44.622 MDE Turkey gro -46.779 0.161 66.353 MDE Turkey gro -46.735 -0.233 -46.161 SAA Bangladesh gro 32.077 1.04.320 0.047 1.41.260 MDE Turkey vft 1.32.207 1.044 32.2073 1.043 1.00.603	Simulate	d %-changes in allocat	ed area: 1997 -	2050, continue	d	
MDE Iran,-Islamic-Rep. vf 148.860 0.016 148.820 MDE Syrian-Arab-Rep. cb 108.250 0.0374 -51.330 MDE Syrian-Arab-Rep. gro -14.513 0.016 108.230 MDE Syrian-Arab-Rep. gro -14.613 0.015 9.053 MDE Syrian-Arab-Rep. pdf 109.100 0.006 109.080 MDE Syrian-Arab-Rep. vft 124.290 0.0011 46.649 MDE Syrian-Arab-Rep. vft 124.290 0.100 110.150 MDE Turkey ocr 66.779 0.161 66.350 MDE Turkey ocr 61.677 0.236 15.428 MDE Turkey pdd 110.100 -2.105 115.577 MDE Turkey pdd 146.735 0.235 42.292 SAA Bangladesh gro 42.733 0.320 133.207 SAA Bangladesh pdf	Region	country	crop	scenario A	scneario B	scenario C
MDE Iran, Islamic-Rep. vft 148.800 0.016 148.820 MDE Syrian-Arab-Rep. cb 108.250 0.006 108.230 MDE Syrian-Arab-Rep. cc 5.912 0.011 5.583 MDE Syrian-Arab-Rep. occ 5.912 0.011 46.549 MDE Syrian-Arab-Rep. opd 109.000 0.066 109.980 MDE Syrian-Arab-Rep. vft 124.290 0.011 46.549 MDE Syrian-Arab-Rep. vft 124.290 0.010 110.150 MDE Turkey gro -43.793 0.311 -44.622 MDE Turkey grd 110.00 -2.105 115.970 MDE Turkey pdr 110.100 -2.105 115.470 MDE Turkey pdr 143.383 -0.236 10.600 SAA Bangladesh ocr 30.77 1.048 22.278 SAA Bangladesh odr	MDE		C	%	%	%
INDE India - Bang Bandesh Value Value <td>MDE</td> <td>Iran,-Islamic-Rep.</td> <td>vi</td> <td>148.860</td> <td>0.016</td> <td>148.820</td>	MDE	Iran,-Islamic-Rep.	vi	148.860	0.016	148.820
MDE Syrian-Arab-Rep. ero -14.513 0.018 -14.560 MDE Syrian-Arab-Rep. oscl 9.094 0.011 55.883 MDE Syrian-Arab-Rep. pdf 100.100 0.006 109.800 MDE Syrian-Arab-Rep. vf 124.290 0.011 45.583 MDE Syrian-Arab-Rep. vf 124.290 0.005 124.280 MDE Turkey cr 66.779 0.181 46.929 MDE Turkey oscr 66.779 0.181 66.350 MDE Turkey oscr 96 11.015 0.047 141.280 MDE Turkey pd 141.800 0.047 141.280 10.603 16.534 MDE Turkey pd 141.380 0.043 142.293 10.633 16.324 10.293 14.6116 10.507 10.517 141.280 10.600 12.337 10.333 10.312 12.337 10.333 12.207 141.280	MDE	Svrian-Arab-Ben	ch	108 250	0.006	108 230
MDE Syrian-Arab-Rep. ocr 55.912 0.011 55.883 MDE Syrian-Arab-Rep. pdr 109.100 0.006 109.080 MDE Syrian-Arab-Rep. vft 124.290 0.005 124.280 MDE Syrian-Arab-Rep. vft 124.290 0.100 110.150 MDE Turkey cb 110.420 0.100 110.150 MDE Turkey ocr 66.779 0.161 66.350 MDE Turkey odd 110.100 -2.105 115.970 MDE Turkey odd 1.677 0.236 1.5.428 MDE Turkey odd 1.677 0.235 42.929 SAA Bangladesh cb 42.935 0.235 42.929 SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh ocr 107.70 1.084 32.073 SAA Bangladesh off<133.230	MDE	Syrian-Arab-Rep.	gro	-14.513	0.018	-14.560
MDE Syrian-Arab-Rep. ord 9.094 0.016 9.080 MDE Syrian-Arab-Rep. ph 40.9100 0.006 109.080 MDE Syrian-Arab-Rep. vf 124.290 0.005 124.280 MDE Syrian-Arab-Rep. vh 13.492 -0.188 13.993 MDE Turkey cb 110.420 0.000 110.150 MDE Turkey ocr 66.779 0.236 15.422 MDE Turkey pdr 110.100 -2.105 115.970 MDE Turkey pdr 110.100 -2.335 +4.926 SA Bangladeab cr 12.070 1.81 10.970 MDE Turkey vf 141.280 0.235 +4.9267 SA Bangladeab gro 13.230 0.320 133.220 SAA Bangladeab pdr -23.381 -0.135 -23.377 SAA Bangladeab pdr -23.020	MDE	Syrian-Arab-Rep.	ocr	55.912	0.011	55.883
MDE Syrian-Arab-Rep. pdfb 109.100 0.001 46.949 MDE Syrian-Arab-Rep. vf 124.290 0.005 124.280 MDE Syrian-Arab-Rep. vht 13.492 0.101 140.943 MDE Turkey gro -43.793 0.311 -44.622 MDE Turkey ocr 66.779 0.161 66.350 MDE Turkey ocd 16.057 0.236 15.428 MDE Turkey pdfb 1.1815 0.247 141.260 MDE Turkey wht -46.735 0.235 42.947 MDE Turkey wht -46.735 0.235 42.943 SAA Bangladesh opf 132.200 0.268 100.000 SAA Bangladesh opf -6.381 -0.335 42.929 SAA Bangladesh opf -5.4316 0.033 38.200 SAA Bangladesh opf -5.658	MDE	Syrian-Arab-Rep.	osd	9.094	0.015	9.053
DDE Syrian-Arab-Rep. pi0 40.949 0.011 40.949 MDE Syrian-Arab-Rep. wht 13.422 0.005 124.289 MDE Turkey cb 113.492 -0.188 13.993 MDE Turkey gro 43.793 0.311 46.359 MDE Turkey odd 16.057 0.236 15.428 MDE Turkey odd 110.010 -2.105 115.970 MDE Turkey odd 110.100 -2.035 42.929 SAA Bangladesh eb 42.935 0.235 42.929 SAA Bangladesh ocd 100.600 2.866 100.600 SAA Bangladesh pfb -23.381 -0.135 -23.377 SAA Bangladesh vft 109.770 0.181 109.770 SAA Bangladesh vft 109.770 0.181 $10.92.77$ SAA B	MDE	Syrian-Arab-Rep.	pdr	109.100	0.006	109.080
MDE Syrian-Aberlep. wht 13.402 -0.188 13.030 MDE Turkey cb 110.420 0.100 110.150 MDE Turkey cc 66.779 0.236 15.422 MDE Turkey ocr 66.779 0.236 15.428 MDE Turkey pdr 110.100 -2.105 115.970 MDE Turkey pdr 11.815 0.247 -2.474 MDE Turkey vff 14.1380 0.047 14.267 MDE Turkey vff 14.1380 0.235 42.929 SAA Bangladesh cc 100.600 0.286 100.600 SAA Bangladesh pdr -5.331 6.458 SAA Bangladesh pdr -5.411 0.562 -5.426 SAA Bangladesh vft 19.970 0.181 109.770 SAA Bangladesh vft -5.658 0.436 -56.658	MDE	Syrian Arab Bop	pib	40.979	0.011	40.949
MDETurkeycb 110.420 0.100 110.150 MDETurkeyocr 64.793 0.311 -44.622 MDETurkeyocd 66.779 0.161 66.350 MDETurkeypdb 110.100 -2.105 115.970 MDETurkeypdb -1.815 0.247 -2.474 MDETurkeyvfb 141.380 0.047 -2.474 MDETurkeyvf 141.380 0.047 -2.474 MDETurkeyvf 141.380 0.047 141.260 MDETurkeyvf 141.380 0.047 143.260 SAABangladeshccr 100.600 0.286 100.600 SAABangladeshocd 6.475 0.453 6.458 SAABangladeshpdr -23.381 -0.135 -23.377 SAABangladeshvht -5.411 0.562 -5.426 SAAIndiacb 38.706 -0.073 38.800 SAAIndiacb 38.706 -0.033 15.880 SAAIndiacb 36.685 -0.68 15.889 SAAIndiapdr -56.58 0.436 -56.657 SAAIndiapdr -56.578 0.436 -56.677 SAAIndiapdr -56.578 0.436 -56.657 SAAIndiapdr -16.290 0.0071 -0.5883 SAAIndiapdr -56	MDE	Syrian-Arab-Rep.	wht	13.492	-0.188	13.993
MDE Turkey gro -43.793 0.311 -44.629 MDE Turkey ocr 66.77 0.361 16.6350 MDE Turkey pdr 110.100 -2.105 115.970 MDE Turkey pfb -1.815 0.247 -2.473 MDE Turkey vf 141.380 0.047 -1.2420 SAA Bangladesh cb 42.935 -0.233 -46.16 SAA Bangladesh ocr 100.670 23.81 -0.353 -46.16 SAA Bangladesh ocr 100.770 1.084 32.670 SAA Bangladesh pdr -53.381 -0.353 -64.375 SAA Bangladesh vf 109.770 0.181 109.770 SAA Bangladesh vf 109.770 0.181 109.770 SAA India ocr 107.470 -0.430 107.470 SAA India ocr 107.470 <t< td=""><td>MDE</td><td>Turkey</td><td>cb</td><td>110.420</td><td>0.100</td><td>110.150</td></t<>	MDE	Turkey	cb	110.420	0.100	110.150
MDE Turkey oer 66.779 0.161 66.350 MDE Turkey pdr 110.100 -2.105 115.970 MDE Turkey pdf -1.815 0.237 -2.474 MDE Turkey vf 141.380 0.047 141.260 MDE Turkey wht -46.735 0.233 -46.116 SAA Bangladesh cb 42.935 0.235 42.929 SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh pdf -23.381 -0.135 -23.377 SAA Bangladesh vf 109.770 0.181 109.770 SAA India cb 38.796 -0.073 38.800 SAA India gro -13.020 -0.040 -12.977 SAA India gro -13.020 -0.058 113.350 SAA India gro -13.020 -0.058 13.343	MDE	Turkey	gro	-43.793	0.311	-44.622
MDE Turkey osd 16.057 0.236 15.970 MDE Turkey pdr 110.100 -2.105 115.970 MDE Turkey pdr 141.380 0.047 124.74 -2.474 MDE Turkey wht -46.735 -0.233 -46.116 SAA Bangladesh cb 42.935 0.435 42.929 SAA Bangladesh occ 100.600 0.286 100.600 SAA Bangladesh pdr -23.381 -0.135 -23.377 SAA Bangladesh yft 109.770 0.181 109.770 SAA Bangladesh yft 109.770 0.181 109.770 SAA India gro -13.200 -0.040 -12.977 SAA India occ 107.470 -0.130 107.470 SAA India pdr -6.658 0.436 -56.657 SAA India pdr -13.3803	MDE	Turkey	ocr	66.779	0.161	66.350
MDEInrkeypdf110.100 -2.103 119.370MDETurkeyvf141.3800.047141.260MDETurkeyvf141.3800.047141.260MDETurkeywht46.7350.23346.116SAABangladeshcb42.9350.22542.929SAABangladeshocr100.6000.286100.600SAABangladeshocr100.6000.286100.600SAABangladeshpdf-23.381-0.135-23.377SAABangladeshvf109.7700.181109.770SAABangladeshwht-5.4165.426SAAIndiacb38.796-0.07338.800SAAIndiaocr107.470-0.130107.470SAAIndiaocr107.470-0.130164.230SAAIndiapdr-56.6880.436-56.677SAAIndiapdr-56.688-0.058113.850SAAIndiavf113.850-0.0487-33.644SAAPakistancb36.085-0.16536.732SAAPakistanocr100.700-0.331-0.330SAAPakistanpdf13.230-0.027-33.978SAAPakistanpdf-35.765-0.487-33.644SAAPakistanocr100.700-33.30SAAPakistanpdf13.230-0.071	MDE	Turkey	osd	16.057	0.236	15.428
MDE Turkey rf 141.380 0.047 141.260 MDE Turkey wht -6.33 -0.233 -46.116 SAA Bangladesh gb 42.935 -0.235 42.929 SAA Bangladesh gcr 32.707 1.084 32.678 SAA Bangladesh gcr 132.303 0.320 133.220 SAA Bangladesh yf 109.770 0.181 109.770 SAA Bangladesh yf 109.770 0.181 109.770 SAA Bangladesh yf 109.700 0.181 109.770 SAA India gcr -13.020 -0.040 -12.977 SAA India ocr 107.470 0.181 1.850 SAA India odf -56.657 13.850 0.051 16.320 SAA India yf 13.850 0.027 -33.978 SAA SAA India yf 13.850 <td>MDE</td> <td>Turkey</td> <td>pti</td> <td>-1.815</td> <td>0.247</td> <td>-2.474</td>	MDE	Turkey	pti	-1.815	0.247	-2.474
MDE Turkey wht -46.735 -0.233 -46.116 SAA Bangladesh cb 42.935 0.235 42.929 SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh ocd 6.475 0.653 6.458 SAA Bangladesh pft -23.381 -0.135 -23.377 SAA Bangladesh vf 109.770 0.181 109.770 SAA Bangladesh wft 109.770 0.181 109.770 SAA India cb 38.966 -0.073 38.800 SAA India gro -13.020 -0.040 -12.977 SAA India gro -15.0130 107.470 SAA India gro -15.880 -0.058 113.850 SAA India wft 113.850 -0.0670 -0.137 107.40 SAA Pakistan gro -35.765 -0.487	MDE	Turkey	vf	141.380	0.047	141.260
SAA Bangladesh cb 42.935 0.235 42.929 SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh pdr -23.381 -0.135 -23.377 SAA Bangladesh pdr 109.770 0.181 109.770 SAA Bangladesh wht -5.411 0.562 -5.426 SAA India gro -13.020 -0.040 -12.977 SAA India gro -13.020 -0.040 -12.977 SAA India gro -13.020 -0.010 164.320 SAA India gro -13.805 0.58 113.850 SAA India pdr -66.058 -0.436 -56.657 SAA Pakistan gro -35.765 -0.487 -35.464 SAA Pakistan ocr 100.700 -0.171	MDE	Turkey	wht	-46.735	-0.233	-46.116
SAA Bangladesh ocr 100.600 0.286 100.600 SAA Bangladesh osd 6.475 0.653 6.458 SAA Bangladesh pdf 133.230 0.320 133.220 SAA Bangladesh vf 109.770 0.181 109.770 SAA Bangladesh vht -5.411 0.562 -5.426 SAA India gro -13.020 -0.040 -12.977 SAA India gro -13.020 -0.040 -12.977 SAA India gro -13.020 -0.610 164.320 SAA India pdr -56.658 0.487 -35.689 SAA India vf 113.850 -0.058 113.850 SAA Pakistan cr 100.707 -0.377 -33.978 SAA Pakistan cr 100.700 -0.487 -35.464 SAA Pakistan ocr 100.700 -0.577	SAA	Bangladesh	$^{\rm cb}$	42.935	0.235	42.929
SAA Bangjadesh ocr 100.000 0.280 100.000 SAA Bangjadesh pdr -23.381 -0.135 -23.377 SAA Bangjadesh pdr 133.230 0.320 133.220 SAA Bangjadesh vf 109.770 0.181 109.770 SAA Bangjadesh vf 109.770 0.181 107.470 SAA India cb 38.796 -0.073 38.800 SAA India ocr 107.470 -0.130 107.470 SAA India ocr 107.470 -0.38 -15.889 SAA India pdr -56.658 0.436 -56.657 SAA India vht -33.903 -0.027 -33.978 SAA Pakistan cb -36.655 -0.457 -65.83 SAA Pakistan ocr 100.700 -0.37 100.740 SAA Pakistan pdr -66.040 -571	SAA	Bangladesh	gro	32.707	1.084	32.678
SAA Bangladesh pdr -23.381 -0.135 -23.377 SAA Bangladesh pfb 133.230 0.320 133.220 SAA Bangladesh vf 109.770 0.181 109.770 SAA Bangladesh vht -5.411 0.562 -5.426 SAA India gro -13.020 -0.040 -12.977 SAA India oct 107.470 -0.130 107.470 SAA India oct 107.470 -0.130 107.470 SAA India oct 107.470 -0.130 107.470 SAA India oct 113.850 -0.058 113.850 SAA India vf 113.850 -0.058 113.850 SAA Pakistan ccr 100.700 -0.137 100.704 SAA Pakistan pdr -66.004 .571 -33.230 SAA Pakistan pdr -100.700 -0.137	SAA	Bangladesh	ocr	6 475	0.280	6 458
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAA	Bangladesh	osu pdr	-23.381	-0.135	-23.377
SAABangladeshof109.7700.181109.770SAABangladeshwht-5.4110.562-5.426SAAIndiacb38.796-0.07338.800SAAIndiaor-13.020-0.040-12.977SAAIndiaord-17.470-0.130107.470SAAIndiapdb-56.6580.436-56.657SAAIndiapdb164.290-0.610164.320SAAIndiawht-33.903-0.027-33.978SAAIndiawht-33.903-0.027-33.978SAAPakistancb36.685-0.16536.732SAAPakistanocr100.700-0.137100.740SAAPakistanocr100.700-0.137100.740SAAPakistanpdb132.130-0.670132.330SAAPakistanpdf-10.6000.0271-37.82SAAPakistanwht-37.2250.271-37.82SAAPakistanocr59.1450.33159.166SAASri-Lankaocr59.1450.33159.166SAASri-Lankaocr59.1450.33159.166SAASri-Lankapdf-71.452-0.611-71.439SAASri-Lankapdf-71.452-0.611-71.439SAASri-Lankapdf-71.00.0000.0000.000SAMArgentina <td< td=""><td>SAA</td><td>Bangladesh</td><td>pfb</td><td>133.230</td><td>0.320</td><td>133.220</td></td<>	SAA	Bangladesh	pfb	133.230	0.320	133.220
SAA Bangladesh wht -5.411 0.562 -5.426 SAA India gro -13.020 -0.040 -12.977 SAA India ocr 107.470 -0.130 107.470 SAA India ocr 107.470 -0.130 107.470 SAA India pdr -56.658 0.438 -15.889 SAA India wft 13.350 -0.027 -33.978 SAA India wft -33.093 -0.027 -33.978 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocf 10.700 -0.137 100.740 SAA Pakistan pdr -66.040 0.571 -65.883 SAA Pakistan vf 110.650 -0.095 110.680 SAA Pakistan vf 10.650 -0.051 110.483 SAA Sri-Lanka ocf 59.145 0.331 59.136 SAA Sri-Lank	SAA	Bangladesh	vf	109.770	0.181	109.770
SAA India cb $38,796$ -0.073 $38,800$ SAA India ocr 107.470 -0.130 107.470 SAA India ocr 107.470 -0.388 -15.889 SAA India pdr -56.658 0.436 -56.657 SAA India vf 113.850 -0.058 113.850 SAA India vf 113.850 -0.058 113.850 SAA Pakistan cb 36.6685 -0.165 36.732 SAA Pakistan occ 100.700 -0.137 100.740 SAA Pakistan pdr -35.765 -0.487 -35.464 SAA Pakistan pdr -31.384 -0.511 -31.236 SAA Pakistan pdr -37.725 0.838 -57.761 SAA Pakistan wh -37.225 0.271 -37.382 SAA Sri-Lanka <td< td=""><td>SAA</td><td>Bangladesh</td><td>wht</td><td>-5.411</td><td>0.562</td><td>-5.426</td></td<>	SAA	Bangladesh	wht	-5.411	0.562	-5.426
SAA India gro -13.20 -0.030 -12.977 SAA India ocr 107.470 -0.130 107.470 SAA India pdr -56.658 -0.138 -15.889 SAA India pdr -56.658 -0.058 113.850 SAA India wht -33.903 -0.027 -33.978 SAA Pakistan gro -35.765 -0.487 -35.464 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocr 100.700 $-0.132.330$ SAA Pakistan ocr 100.700 $-0.132.330$ SAA Pakistan vf 110.650 -0.095 110.680 SAA Pakistan vf 110.650 0.211 19.354 SAA Sri-Lanka cb 19.360 0.211 19.354 SAA Sri-Lanka odf -71.452 -0.511 -71.439 SAA Sri-Lanka odf	SAA	India	cb	38.796	-0.073	38.800
SAA India Ocl 101.40 -0.130 101.410 SAA India pdr -56.658 0.436 -56.657 SAA India pfr 164.290 -0.610 164.320 SAA India wht -33.903 -0.027 -33.978 SAA Pakistan cb 36.685 -0.137 100.740 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocr 100.700 -0.670 132.330 SAA Pakistan pfr 110.650 -0.095 110.680 SAA Pakistan wfr 110.650 -0.095 110.680 SAA Pakistan wf 110.650 -0.095 110.680 SAA SAI- Saistan wf 110.420 0.211 19.354 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-	SAA	India	gro	-13.020	-0.040	-12.977
SAA India pdr -56.658 0.436 -56.657 SAA India pfb 164.290 -0.610 164.320 SAA India vf 113.850 -0.058 113.850 SAA India wht -33.903 -0.027 -33.978 SAA Pakistan cb 36.685 -0.165 36.732 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocr 110.650 -0.095 110.680 SAA Pakistan wht -37.225 0.271 -37.382 SAA Pakistan wht -37.225 0.271 -37.382 SAA Sri-Lanka ocr 59.145 0.331 59.135 SAA Sri-Lanka ocr 59.145 0.331 59.135 SAA Sri-Lanka pdr -71.452 -0.511 -71.439 SAA Sri-Lanka pdr -71.452 -0.511	SAA	India	osd	-15 913	-0.388	-15 889
SAA India pfb 164.290 -0.610 164.320 SAA India vf 113.850 -0.058 113.850 SAA India wht -33.903 -0.027 -33.978 SAA Pakistan gro -35.765 -0.487 -35.464 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocf -66.004 0.571 -65.883 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan vf 110.650 -0.095 110.680 SAA Pakistan wht -37.225 0.271 -37.382 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-Lanka ocr -59.145 0.331 59.136 SAA Sri-Lanka off -00.000 -0.000 0.000 SAA Sri-Lanka off 80.192 -22.99	SAA	India	pdr	-56.658	0.436	-56.657
SAA India vf 113.850 -0.028 113.850 SAA Pakistan cb 36.093 -0.027 -33.978 SAA Pakistan gro -35.765 -0.487 -35.464 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan odd -31.384 -0.511 -31.236 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan wht -37.225 0.271 -37.382 SAA Pakistan wht -37.225 0.271 -37.382 SAA Sri-Lanka ocr 57.739 0.838 -57.761 SAA Sri-Lanka ocr -51.455 0.331 59.136 SAA Sri-Lanka pdr -71.452 -0.511 -71.439 SAA Sri-Lanka pdr 0.000 0.000 0.000 SAA Sri-Lanka pdr 0.000 0.627 -100.000 SAM	SAA	India	pfb	164.290	-0.610	164.320
SAA India wht -33.903 -0.027 -33.978 SAA Pakistan cb 36.685 -0.165 36.732 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan vf 110.650 -0.095 110.680 SAA Sti-Lanka cb 19.360 0.211 19.354 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-Lanka odr -71.452 -0.511 -71.439 SAA Sri-Lanka pdr -71.452 -0.511 -71.439 SAA Sri-Lanka pdr -90.000 0.000 0.000 SAA Sri-Lanka vf 80.192 0.229 </td <td>SAA</td> <td>India</td> <td>$\mathbf{v}\mathbf{f}$</td> <td>113.850</td> <td>-0.058</td> <td>113.850</td>	SAA	India	$\mathbf{v}\mathbf{f}$	113.850	-0.058	113.850
SAA Pakistan cb 30.885 -0.165 36.732 SAA Pakistan gro -35.765 -0.487 -35.644 SAA Pakistan osd -31.384 -0.511 -31.236 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan vf 110.650 -0.095 110.680 SAA Pakistan wht -37.225 0.271 -37.382 SAA Sri-Lanka gro -57.739 0.838 -57.761 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-Lanka pdr -71.452 -0.511 -71.439 SAA Sri-Lanka pfb 0.000 0.000 0.000 SAM Argentina cb -100.000 -627 -100.000 SAM Argentina ocr -33.432 0.654 -83.563 SA	SAA	India	wht	-33.903	-0.027	-33.978
SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan ocr 100.700 -0.137 100.740 SAA Pakistan pdr -66.004 0.571 -31.236 SAA Pakistan pfb 132.130 -0.670 132.330 SAA Pakistan wht -37.225 0.271 -37.382 SAA Pakistan wht -37.225 0.271 -37.382 SAA Sri-Lanka gro -57.739 0.838 -57.761 SAA Sri-Lanka ocr 59.145 0.331 59.136 SAA Sri-Lanka pdr -71.452 0.682 -47.890 SAA Sri-Lanka pdf 0.000 0.000 0.000 SAA Sri-Lanka pdf 0.000 0.000 0.000 SAA Sri-Lanka vf 80.192 0.229 80.186 SAM Argentina	SAA	Pakistan	cb	36.685	-0.165	36.732
SAA Pakistan osd -31.384 -0.511 -31.236 SAA Pakistan pdr -66.004 0.571 -65.883 SAA Pakistan pfb 132.130 -0.670 132.330 SAA Pakistan wf 110.650 -0.095 110.680 SAA Sri-Lanka cb 19.360 0.211 19.354 SAA Sri-Lanka gro -57.739 0.838 -57.761 SAA Sri-Lanka osd -47.872 0.682 -47.879 SAA Sri-Lanka osd -71.452 -0.511 -71.439 SAA Sri-Lanka pfb 0.000 0.000 0.000 SAM Argentina gro -100.000 -622 -100.000 SAM Argentina ocr -83.432 0.654 -83.563 SAM Argentina pdr 57.028 0.094 57.010 SAM Argent	SAA	Pakistan	ocr	100.700	-0.137	100.740
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAA	Pakistan	osd	-31.384	-0.511	-31.236
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAA	Pakistan	pdr	-66.004	0.571	-65.883
SAAPakistanvf 110.650 -0.095 110.680 SAAPakistanwht -37.225 0.271 -37.382 SAASri-Lankagro -57.739 0.838 -57.761 SAASri-Lankagro -57.739 0.838 -57.761 SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankaocd -47.872 0.682 -47.890 SAASri-Lankapdr -71.452 -0.511 -71.439 SAASri-Lankapfb 0.000 0.000 0.000 SAASri-Lankapfb 0.000 0.627 -100.000 SAMArgentinacb -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaocd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapdr -92.750 -10.000 0.000 SAMArgentinawht 57.028 0.094 57.010 SAMArgentinawht 57.300 0.696 57.361 SAMBoliviacb -100.000 -46.409 -0.549 -45.746 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 </td <td>SAA</td> <td>Pakistan</td> <td>pfb</td> <td>132.130</td> <td>-0.670</td> <td>132.330</td>	SAA	Pakistan	pfb	132.130	-0.670	132.330
SAAFakistanwith -37.223 0.211 -37.382 SAASri-Lankagro -57.739 0.838 -57.761 SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankapdr -71.452 -0.511 -71.439 SAASri-Lankapfb 0.000 0.000 0.000 SAASri-Lankapfb 0.000 0.627 -100.000 SAASri-Lankavf 80.192 0.229 80.186 SAMArgentinagro -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaocd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapdr -57.028 0.094 57.010 SAMArgentinavf 57.028 0.094 57.010 SAMBoliviacb -100.000 0.491 -100.000 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -66.733 SAMBoliviapdr -76.059 0.428 -76.573 <td>SAA</td> <td>Pakistan</td> <td>vf</td> <td>110.650</td> <td>-0.095</td> <td>110.680</td>	SAA	Pakistan	vf	110.650	-0.095	110.680
SAASri-Lankagro -57.739 0.838 -57.761 SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankaodd -47.872 0.682 -47.890 SAASri-Lankapdr -71.452 -0.511 -71.439 SAASri-Lankapfb 0.000 0.000 0.000 SAASri-Lankapfb 0.000 0.000 0.000 SAASri-Lankapfb 0.000 0.627 -100.000 SAMArgentinagro -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaocd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapfb 0.000 0.000 0.000 SAMArgentinapfb 0.000 0.000 SAMArgentinawht 57.028 0.994 57.010 SAMArgentinavf 57.028 0.994 57.010 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviagro -46.640 0.616 25.496 SAMBoliviagro -46.640 0.616 25.496 SAMBoliviagro -0.064 0.193 0.205 SAMBolivia	SAA	Sri-Lanka	ch	-37.223	0.271	-37.382
SAASri-Lankaocr 59.145 0.331 59.136 SAASri-Lankaodd -47.872 0.682 -47.890 SAASri-Lankapdr -71.452 -0.511 -71.439 SAASri-Lankapdr 0.000 0.000 0.000 SAASri-Lankapdr 0.000 0.000 0.000 SAASri-Lankavf 80.192 0.229 80.186 SAMArgentinacb -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaodd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapfb 0.000 0.000 0.000 SAMArgentinawht 57.300 0.666 57.361 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviaocr -20.710 0.232 -21.000 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -53.526 0.170 53.314 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 53.526 0.170 53.314 SAM<	SAA	Sri-Lanka	gro	-57.739	0.838	-57.761
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAA	Sri-Lanka	ocr	59.145	0.331	59.136
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAA	Sri-Lanka	osd	-47.872	0.682	-47.890
SAA Sri-Lanka ptb 0.000 0.000 0.000 0.000 SAA Sri-Lanka vf 80.192 0.229 80.186 SAM Argentina gro -100.000 0.627 -100.000 SAM Argentina gro -100.000 -1.524 -100.000 SAM Argentina ocr -83.432 0.654 -83.563 SAM Argentina odd 13.154 0.620 13.030 SAM Argentina pdr -92.975 -1.208 -92.106 SAM Argentina pdr 57.028 0.094 57.010 SAM Argentina wht 57.300 0.666 57.361 SAM Bolivia cb -100.000 0.491 -100.000 SAM Bolivia gro -46.409 -0.549 -45.746 SAM Bolivia pdr -68.543 -0.248 -68.784 SAM Bolivia pdr -68.543 -0.248 -68.784 <t< td=""><td>SAA</td><td>Sri-Lanka</td><td>pdr</td><td>-71.452</td><td>-0.511</td><td>-71.439</td></t<>	SAA	Sri-Lanka	pdr	-71.452	-0.511	-71.439
SAASIALVI 80.192 0.229 80.180 SAMArgentinacb -100.000 0.627 -100.000 SAMArgentinagro -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaodd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapfb 0.000 0.000 0.000 SAMArgentinavf 57.028 0.094 57.010 SAMBoliviacb -100.000 0.491 -100.000 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviaocr -20.710 0.232 -21.000 SAMBoliviaodf -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviawht 35.180 0.990 33.945 SAMBrazilcb -76.059 0.428 -76.573 SAMBrazilpdr -40.4777 -0.354 -40.619 SAMBrazilpdr -40.4777 -0.354 -40.619 SAMBrazilpdr -40.4777 -0.354 -40.619 SAMBrazilpdr -40.4777 -0.293 77.324 SAM </td <td>SAA</td> <td>Sri-Lanka</td> <td>pfb</td> <td>0.000</td> <td>0.000</td> <td>0.000</td>	SAA	Sri-Lanka	pfb	0.000	0.000	0.000
SAMArgentinaGO -100.000 -1.524 -100.000 SAMArgentinaocr -83.432 0.654 -83.563 SAMArgentinaosd 13.154 0.620 13.030 SAMArgentinapdr -92.975 -1.208 -92.106 SAMArgentinapfb 0.000 0.000 0.000 SAMArgentinavf 57.028 0.094 57.010 SAMArgentinavf 57.028 0.094 57.010 SAMArgentinawht 57.300 0.666 57.361 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviaocr -20.710 0.232 -210000 SAMBoliviaocr -20.710 0.232 -210000 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 51.80 0.990 33.945 SAMBrazilgro -0.644 -0.193 0.205 SAMBrazilocr -12.275 0.395 -12.749 SAMBrazilpdr -40.477 -0.354 -40.619 SAMBrazilpdr -40.477 -0.354 -40.619 SAMBrazilpdr -52.912 1.700 -54.951 SAMB	SAM	Argentina	vi ch	-100.000	0.229	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Argentina	gro	-100.000	-1.524	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SAM	Argentina	ocr	-83.432	0.654	-83.563
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAM	Argentina	osd	13.154	0.620	13.030
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAM	Argentina	pdr	-92.975	-1.208	-92.106
SAMArgentina v_1 01.026 0.034 51.010 SAMArgentinawht 57.300 0.696 57.361 SAMBoliviacb -100.000 0.491 -100.000 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviaocr -20.710 0.232 -21.000 SAMBoliviaodd 26.264 0.616 25.496 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 53.526 0.170 53.314 SAMBrazilcb -76.059 0.428 -76.573 SAMBrazilgro -0.064 -0.193 0.205 SAMBrazilocr -12.275 0.395 -12.749 SAMBrazilpdr -40.477 -0.354 -40.619 SAMBrazilpdr -40.477 -0.54 -40.619 SAMBrazilpdr -52.912 1.700 -54.951 SAMBrazilvf 61.474 0.122 61.328 SAMBrazilvf 61.474 0.123 77.324 SAMBrazilvf 61.474 0.293 77.324 SAMChilecb -100.000 0.544 -100.000 SAMChilecb <td< td=""><td>SAM</td><td>Argentina</td><td>ptb</td><td>0.000</td><td>0.000</td><td>0.000</td></td<>	SAM	Argentina	ptb	0.000	0.000	0.000
SAMBoliviacb -100.000 0.491 -100.000 SAMBoliviagro -46.409 -0.549 -45.746 SAMBoliviaocr -20.710 0.232 -21.000 SAMBoliviaocr 22.644 0.616 25.496 SAMBoliviapdr -68.543 -0.248 -68.784 SAMBoliviapfb -100.000 2.207 -100.000 SAMBoliviavf 53.526 0.170 53.314 SAMBoliviavf 55.526 0.170 53.314 SAMBoliviavf 55.526 0.170 53.314 SAMBoliviavf 55.526 0.170 53.314 SAMBrazilcb -76.059 0.428 -76.573 SAMBrazilgro -0.064 -0.193 0.205 SAMBrazilocr -12.275 0.395 -12.749 SAMBrazilpdr -40.477 -0.354 -40.619 SAMBrazilpdr -40.477 -0.354 -40.619 SAMBrazilvf 61.474 0.122 61.328 SAMBrazilvf 61.474 0.122 61.328 SAMBrazilwht 75.847 -0.293 77.324 SAMChilecb -100.000 0.695 -100.000 SAMChilecb -100.000 0.695 -100.000	SAM	Argentina	wht	57.300	0.696	57,361
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Bolivia	cb	-100.000	0.491	-100.000
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAM	Bolivia	gro	-46.409	-0.549	-45.746
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Bolivia	ocr	-20.710	0.232	-21.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Bolivia	osd	26.264	0.616	25.496
SAM Bolivia p_{1D} -100.000 2.207 -100.000 SAM Bolivia vf 53.526 0.170 53.314 SAM Bolivia wht 35.180 0.990 33.945 SAM Brazil cb -76.059 0.428 -76.573 SAM Brazil gro -0.064 -0.193 0.205 SAM Brazil ocr -12.275 0.395 -12.749 SAM Brazil odd 36.290 0.862 35.256 SAM Brazil pdr -40.477 -0.354 -40.619 SAM Brazil pdr -52.912 1.700 -54.951 SAM Brazil vf 61.474 0.122 61.328 SAM Brazil wht 75.847 -0.293 77.324 SAM Chile cb -100.000 0.544 -100.000 SAM Chile cb	SAM	Bolivia Bolivia	pdr pfb	-68.543	-0.248	-68.784
SAM Bolivia wht 35.180 0.190 33.945 SAM Brazil cb -76.059 0.428 -76.573 SAM Brazil gro -0.064 -0.193 0.205 SAM Brazil ocr -12.275 0.395 -12.749 SAM Brazil ocd 36.290 0.862 35.256 SAM Brazil pdr -40.477 -0.354 -40.619 SAM Brazil pdr -40.477 -0.354 -40.619 SAM Brazil pdr -40.477 -0.354 -40.619 SAM Brazil pdr -52.912 1.700 -54.951 SAM Brazil wh 75.847 -0.293 77.324 SAM Chile cb -100.000 0.544 -100.000 SAM Chile cb -100.000 0.695 -100.000	SAM	Bolivia	vf	53.526	0.170	53.314
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Bolivia	wht	35.180	0.990	33.945
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Brazil	cb	-76.059	0.428	-76.573
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SAM	Brazil	gro	-0.064	-0.193	0.205
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SAM	Brazil	ocr	-12.275	0.395	-12.749
SAM Brazil pdr -40.477 -0.594 -40.619 SAM Brazil pfb -52.912 1.700 -54.951 SAM Brazil vf 61.474 0.122 61.328 SAM Brazil wht 75.847 -0.293 77.324 SAM Chile cb -100.000 0.544 -100.000 SAM Chile gro -100.000 0.695 -100.000	SAM	Brazil	osd pd-	36.290	0.862	35.256
SAM Brazil vf 61.74 0.122 61.391 SAM Brazil vf 61.474 0.122 61.328 SAM Brazil wht 75.847 -0.293 77.324 SAM Chile cb -100.000 0.544 -100.000 SAM Chile gro -100.000 0.695 -100.000	SAM	Brazil	par nfb	-40.477	-0.354 1.700	-40.019
SAM Brazil wht 75.847 -0.293 77.324 SAM Chile cb -100.000 0.544 -100.000 SAM Chile gro -100.000 0.695 -100.000	SAM	Brazil	vf	61.474	0.122	61.328
SAM Chile cb -100.000 0.544 -100.000 SAM Chile gro -100.000 0.695 -100.000	SAM	Brazil	wht	75.847	-0.293	77.324
SAM Chile gro -100.000 0.695 -100.000	SAM	Chile	cb	-100.000	0.544	-100.000
	SAM	Chile	gro	-100.000	0.695	-100.000

Simulated	%-changes is	n allocated	area:	1997 -	2050, continued	
Region	country			crop	scenario A	S

Region	country	crop	scenario A	scneario B	scenario C
			%	%	%
SAM	Chile	ocr	-100.000	0.508	-100.000
SAM	Chile	osd	-50.853	0.415	-52.177
SAM	Chile	pdr	-100.000	0.543	-100.000
SAM	Chile	pfb	-100.000	3.762	-100.000
SAM	Chile	vf	39.654	0.089	39 371
SAM	Chile	wht	1.665	0.341	1 277
CAM	Chile	W110	-1.000	-0.341	-1.211
SAM	Colombia	CD	-85.551	0.135	-85.677
SAM	Colombia	gro	-27.168	0.205	-27.284
SAM	Colombia	ocr	-23.671	0.195	-23.853
SAM	Colombia	osd	14.666	0.374	14.317
SAM	Colombia	pdr	-49.247	-0.876	-48.785
SAM	Colombia	pfb	-91.823	0.636	-92.416
SAM	Colombia	vf	58 868	0.050	58 821
SAM	Colombia	wht	72.206	0.500	72 770
CAM	Cololibla	witt	12.290	-0.301	13.119
SAM	Ecuador	CD	-97.433	0.065	-97.516
SAM	Ecuador	gro	-64.671	-0.099	-64.559
SAM	Ecuador	ocr	-40.272	0.096	-40.395
SAM	Ecuador	osd	25.525	0.101	25.396
SAM	Ecuador	pdr	-58.014	0.060	-58.091
SAM	Ecuador	nfb	-100.000	0.233	-100.000
SAM	Ecuador	vf	61 931	0.010	61 919
CAM	Ecuador	v1 	01.001	0.1010	22.029
SAM	Ecuador	wht	22.270	0.181	22.038
SAM	Paraguay	CD	-72.691	0.657	-73.553
SAM	Paraguay	gro	-14.842	-0.800	-13.931
SAM	Paraguay	ocr	-18.082	0.478	-18.709
SAM	Paraguay	osd	23.722	0.799	22.673
SAM	Paraguay	pdr	-44.834	-1.519	-44.345
SAM	Paraguay	nfb	-55 611	1 657	-57 786
SAM	Paraguay	pro ref	57 944	0.154	57 142
SAM	Faraguay	VI	37.344	0.134	37.143
SAM	Paraguay	wht	33.646	-0.104	34.854
SAM	Peru	cb	-93.979	0.143	-94.171
SAM	Peru	gro	-67.655	0.043	-67.783
SAM	Peru	ocr	-51.866	0.384	-52.383
SAM	Peru	osd	-1.399	0.455	-2.012
SAM	Peru	ndr	-56 246	-0.702	-55 952
SAM	Poru	pdi	100.000	1.038	100.000
CAM	P eru D	pro	-100.000	1.038	-100.000
SAM	Peru	VI	54.159	0.076	54.056
SAM	Peru	wht	17.854	-0.183	18.773
SAM	Suriname	cb	-14.190	0.001	-14.191
SAM	Suriname	gro	14.863	-0.103	14.990
SAM	Suriname	pdr	-6.756	0.001	-6.757
SAM	Suriname	vf	53.811	0.000	53.811
SAM	Uruguay	ch	-100.000	0.440	-100.000
SAM	Unique	CD CD	20 845	1 225	-100.000
GAM	Uluguay	gro	-82.845	1.220	-84.807
SAM	Uruguay	ocr	-28.098	0.249	-28.497
SAM	Uruguay	osd	16.420	0.608	15.446
SAM	Uruguay	pdr	-61.214	-2.340	-60.089
SAM	Uruguay	pfb	0.000	0.000	0.000
SAM	Uruguay	vf	55.801	0.113	55.619
SAM	Uruguay	wht	56 000	-0.582	57 768
SAM	Vonozuola	ch	90.645	0.002	90.649
CAM	Venezueia	CD	-30.043	0.002	-30.043
SAM	Venezuela	gro	-16.291	0.004	-18.300
SAM	Venezuela	ocr	-24.965	0.002	-24.970
SAM	Venezuela	osd	21.123	0.004	21.114
SAM	Venezuela	pdr	-50.673	0.002	-50.677
SAM	Venezuela	pfb	-100.000	0.009	-100.000
SAM	Venezuela	$\mathbf{v}\mathbf{f}$	60.888	0.000	60.887
SAM	Venezuela	wht	-11 129	-0.555	-9.866
SEA	Cambadia	ab	70 284	0.761	60 506
CEA	Calibodia	CD	-70.364	-0.701	-09.090
SEA	Cambodia	gro	-3.133	-1.742	-1.330
SEA	Cambodia	ocr	112.360	-0.672	113.050
SEA	Cambodia	osd	-8.880	-3.191	-5.576
SEA	Cambodia	pdr	-9.260	0.135	-9.400
SEA	Cambodia	pfb	39.722	-0.438	40.176
SEA	Cambodia	vf	76.667	-0.456	77.139
SEA	Indonesia	ch	-81 710	0 404	-82 138
SEA	Indonesia	<u> </u>	24 001	0.109	24 050
SEA	Indonesia	gro	-34.801	0.183	-34.839
SEA	Indonesia	ocr	75.189	1.363	73.745
SEA	Indonesia	pdr	-33.096	-0.744	-32.350
SEA	Indonesia	pfb	-93.325	3.953	-97.511
SEA	Indonesia	vf	67.151	0.496	66.626
SEA	Lao-People's-DemRep.	$^{\rm cb}$	-62.919	-0.095	-62.821
SEA	Lao-People's-DemRep	gro	2.243	-0.145	2.394
SEA	Lao-People's-Dem -Rep	007	115 260	-0.043	115 300
SEA	Lao Pooplo's Dom P	ord	11 9/1	0.170	11 517
SEA	Lao-reopie s-DemRep.	usa	11.341	-0.170	11.01/
	conti	nuea on n	ext page		

	Simulated	%-changes i	in allocated	area:	1997	- 2050,	continu	ed
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SEA Lao-People's-DemRep. pdr 5.874 0.022 5.808 SEA Lao-People's-DemRep. pdr 28.355 -0.113 28.652 SEA Lao-People's-DemRep. vf 70.951 -0.063 -70.7141 SEA Malaysia ccr -21.733 0.0325 21.396 SEA Malaysia ocr -26.724 0.345 -27.084 SEA Malaysia pdr -41.143 -0.611 -40.400 SEA Malaysia pdr -41.233 -0.611 -76.410 -0.007 -76.402 SEA Myanmar-(Burna) cr -76.410 -0.012 -77.402 -77.402 SEA Myanmar-(Burna) cdr -73.336 -0.019 -4.27.93 -74.942 SEA Philippines cdr -73.336 -0.068 1.001 SEA Philippines cdr -73.336 -0.068 1.001 SEA Philippines cdr -73.336 -0.068 <th>Region</th> <th>country</th> <th>crop</th> <th>scenario A</th> <th>schearlo B</th> <th>scenario C</th>	Region	country	crop	scenario A	schearlo B	scenario C
SEA Lao-People's-DemRep. pfb 28.535 0.113 22.652 SEA Lao-People's-DemRep. vf 70.951 -0.063 71.016 SEA Malaysia gro -42.606 -0.328 -42.174 SEA Malaysia ocr 21.733 0.3255 21.336 SEA Malaysia ocr 47.633 0.000 0.000 SEA Myanmar(Burna) cb -76.410 -0.017 74.423 SEA Myanmar(Burna) ocr 14.6840 -0.019 -6.12.374 SEA Myanmar(Burna) pdr -8.7336 0.067 -73.402 SEA Philippines cor 10.6491 0.141 106.3101 SEA Philippines cor				%	%	%
SEA Lac-People's-Dem-Rep. rb 28.535 -0.113 28.652 SEA Malaysia cb -70.615 0.063 -70.784 SEA Malaysia ocr 21.733 0.325 21.396 SEA Malaysia ocd -26.6724 0.348 -27.085 SEA Malaysia pdf -41.143 -0.631 -40.490 SEA Malaysia pdf -41.143 -0.631 -40.490 SEA Malaysia pdf -116.840 -0.622 -74.47 SEA Myanmar-(Burma) gfc -76.433 0.642 -40.47 SEA Myanmar-(Burma) pdf -12.396 -0.019 -1.47.44 SEA Myanmar-(Burma) pdf -12.366 -0.019 -6.472 SEA Myanmar-(Burma) pdf -12.366 -0.014 -20.709 SEA Philippines gcr -20.019 0.641 -20.73 SEA Philippines gcr	SEA	Lao-People's-DemRep.	pdr	-5.874	0.022	-5.898
SEA Lao-People's-DemRep. vf 70.951 -0.063 71.016 SEA Malaysia gro -42.606 -0.328 -42.174 SEA Malaysia ocr 21.733 0.325 21.396 SEA Malaysia odr -26.724 0.348 -27.085 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia pdr -41.234 0.622 -24.947 SEA Myanmar-(Burma) pdr -12.374 0.622 -24.947 SEA Myanmar-(Burma) pdr -12.366 -0.019 -0.472 SEA Myanmar-(Burma) pdr -12.368 -0.068 -6.472 SEA Philippines cpr -20.019 -0.641 -20.700 SEA Philippines cpr -20.019 -0.641 -20.700 SEA Philippines cpr	SEA	Lao-People's-Dem -Bep	nfb	28 535	-0.113	28.652
SEA Malaysia rote of the second seco	SEA	Lao Poople's Dom. Rop.	pro f	20.000	0.062	71.016
SEA Malaysia Cb -10.013 0.103 -10.741 SEA Malaysia orr 21.733 0.328 -21.743 SEA Malaysia orr 21.735 0.328 21.396 SEA Malaysia pdr -11.43 -0.631 -4.400 SEA Malaysia pdr -76.410 -0.061 -0.000 SEA Malaysia vf 47.633 0.147 47.481 SEA Myanmar-(Burna) cr -76.410 -0.018 116.840 SEA Myanmar-(Burna) odd -6.530 -0.019 -12.374 SEA Myanmar-(Burna) pdr -12.366 -0.019 -12.374 SEA Myanmar-(Burna) vf 80.994 -0.066 81.641 SEA Myanmar-(Burna) vf 80.994 -0.066 81.011 SEA Philippines grd -12.374 -0.061 -27.402 SEA Philippines grd -14.	SEA	Lao-reopie s-DemRep.	VI	70.951	-0.003	71.010
SEA Malaysia gro -42.606 -0.328 -42.173 SEA Malaysia ocr 21.733 0.325 21.396 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia pdr -76.413 -0.617 -76.403 SEA Myamarc Burna) cr -76.433 -0.019 -12.374 SEA Myamarc Burna) ocr -16.840 -0.019 -12.374 SEA Myamarc Burna) pdr -5.726 -0.068 -8.647 SEA Myamarc Burna) pdr -5.726 -0.068 -8.647 SEA Philippines cs -73.336 0.067 -73.402 SEA Philippines cs -72.739 -0.068 -8.647 SEA Philippines ocr 106.450 0.141 106.31 SEA Philippines ocd -	SEA	Malaysia	CD	-70.615	0.163	-70.784
SEA Malaysia oer 21.733 0.325 21.396 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia pdr -41.143 -0.631 -40.490 SEA Malaysia vf 47.633 0.147 47.481 SEA Myanmar-(Burma) cb -76.410 -0.007 -76.402 SEA Myanmar-(Burma) ocr 116.840 -0.018 116.860 SEA Myanmar-(Burma) pdr -42.336 -0.019 -12.374 SEA Myanmar-(Burma) pdr -8.763 -0.006 -8.647 SEA Philippines cb -73.339 0.066 -73.730 SEA Philippines cdr 10.6510 0.443 110.6310 SEA Philippines cdr 17.742 0.363 -17.9455 SEA Philippines pdr -21.058 0.688 -3.917 SEA Thailand cb <td< td=""><td>SEA</td><td>Malaysia</td><td>gro</td><td>-42.606</td><td>-0.328</td><td>-42.174</td></td<>	SEA	Malaysia	gro	-42.606	-0.328	-42.174
SEA Malaysia ord -26.724 0.348 -27.0490 SEA Malaysia pfb 0.000 0.000 SEA Malaysia pfb 0.000 0.000 SEA Myanmar-(Burma) cb -76.410 -0.007 -76.402 SEA Myanmar-(Burma) ocr 116.840 -0.018 116.860 SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.374 SEA Myanmar-(Burma) pdr -12.396 -0.068 8.647 SEA Myanmar-(Burma) vf 80.994 -0.066 81.001 SEA Philippines ocr 106.450 0.141 106.332 SEA Philippines pdr -17.08 822.333 $82.7.333$ 0.043 -17.048 SEA Philippines pdr 4.775 0.324 4.373 SEA Thailand cor 17.742 0.341 4.8453	SEA	Malaysia	ocr	21.733	0.325	21.396
SEA Malaysia pdf -4.1.43 -0.631 -40.490 SEA Malaysia vf 47.633 0.147 47.481 SEA Myanmar-(Burma) gro -24.233 0.6622 -24.947 SEA Myanmar-(Burma) occ 116.840 -0.018 116.860 SEA Myanmar-(Burma) ocd -6.530 -0.049 -6.472 SEA Myanmar-(Burma) pdf -12.396 -0.018 -12.374 SEA Myanmar-(Burma) pd -8.726 -0.068 -8.647 SEA Philippines gro -73.336 0.067 -73.402 SEA Philippines gro -10.591 0.688 -20.368 SEA Philippines grd -21.088 -0.688 -20.363 SEA Philippines yfd 74.433 0.082 74.373 SEA Philippines yfd 74.453 0.688 -20.368 SEA Thailand gro	SEA	Malaysia	osd	-26724	0.348	-27.085
SEA Malaysia pfb -0.00 -0.00 -0.00 -0.00 SEA Myanmar-(Burma) cf 47.633 0.147 47.481 SEA Myanmar-(Burma) gro -76.410 -0.017 -76.402 SEA Myanmar-(Burma) ocr -14.396 -0.018 116.840 SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.374 SEA Myanmar-(Burma) pdr -12.396 -0.068 8.001 SEA Philippines cs $cr 73.360 0.0641 -20.700 SEA Philippines ocr 106.450 0.433 -17.048 SEA Philippines pdr -17.769 0.190 -72.768 SEA Philippines vf 74.453 0.042 -21.988 SEA Thailand cs -72.769 0.190 -72.585 SEA Thailand pdr -35.225 0.111 $	SEA	Malaysia	ndr	41 143	0.631	40.490
SEA Malaysia ptb 0.000 0.000 0.000 SEA Malaysia vf 47.633 0.147 47.481 SEA Myanmar-(Burma) cb -76.410 -0.007 -76.402 SEA Myanmar-(Burma) ocr 116.840 -0.018 116.840 SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.474 SEA Myanmar-(Burma) vf 80.9934 -0.066 81.002 SEA Myanmar-(Burma) vf 80.9949 -0.066 81.002 SEA Philippines cbc -72.63019 0.641 -0.6310 SEA Philippines cpr -21.088 -0.688 -20.363 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cpr -17.769 0.133 -17.955 SEA Thailand cpr -74.263 0.082 74.373 SEA Thailand cpr <t< td=""><td>ODA</td><td>Nialaysia</td><td>pui</td><td>-41.140</td><td>-0.031</td><td>-40.430</td></t<>	ODA	Nialaysia	pui	-41.140	-0.031	-40.430
SEA Malaysia vf 47.633 0.147 47.443 SEA Myanmar-(Burma) gro -24.223 0.622 -24.947 SEA Myanmar-(Burma) oer 116.840 -0.018 116.860 SEA Myanmar-(Burma) pdr -12.396 -0.019 -24.233 SEA Myanmar-(Burma) pdr -8.726 -0.068 -8.647 SEA Myanmar-(Burma) pf -8.726 -0.068 -8.647 SEA Philippines gro -73.336 0.067 -73.402 SEA Philippines oed -16.591 0.463 -20.369 SEA Philippines pdr -21.088 -0.688 -20.363 SEA Thailand cor 74.433 0.082 74.373 SEA Thailand cor 74.433 0.082 74.373 SEA Thailand cor 72.769 0.236 -72.353 SEA Thailand pdr <t< td=""><td>SEA</td><td>Malaysia</td><td>pfb</td><td>0.000</td><td>0.000</td><td>0.000</td></t<>	SEA	Malaysia	pfb	0.000	0.000	0.000
SEA Myanmar-(Burma) cb -76.410 -0.007 -76.4947 SEA Myanmar-(Burma) ocr 116.840 -0.018 116.860 SEA Myanmar-(Burma) pdr -12.396 -0.019 -23.74 SEA Myanmar-(Burma) pdr -8.726 -0.068 8.001 SEA Myanmar-(Burma) vf 80.994 -0.066 81.001 SEA Philippines cor 106.450 0.411 -20.708 SEA Philippines ocr 106.450 0.433 -17.332 0.641 -20.704 SEA Philippines pdr -17.750 0.463 -17.048 582 74.373 0.082 3.917 SEA Philippines pdr -17.750 0.362 3.917 SEA Thailand cor 84.052 -0.249 84.315 SEA Thailand cor 84.052 0.101 -35.329 SEA <td>SEA</td> <td>Malaysia</td> <td>vf</td> <td>47.633</td> <td>0.147</td> <td>47.481</td>	SEA	Malaysia	vf	47.633	0.147	47.481
SEA Myanmar-(Burma) gro -24.223 0.622 $-24.16.860$ SEA Myanmar-(Burma) oed -6.530 -0.019 -6.472 SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.374 SEA Myanmar-(Burma) pdr 80.994 -0.068 -8.647 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines pdr -21.088 -0.688 -20.363 SEA Philippines pdr -27.769 -0.362 -73.363 SEA Thailand cor -77.762 -0.130 -72.565 SEA Thailand pdr -72.576 -0.236 -72.950 SEA Thailand pdr -72.775 -0.336 -72.950 SEA Thailand pdr -72.775 -0.336 -72.950	SEA	Myanmar-(Burma)	cb	-76.410	-0.007	-76.402
SEA Myanmar-(Burma) ocr 116.840 -0.018 116.860 SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.374 SEA Myanmar-(Burma) pdr -8.726 -0.019 -12.374 SEA Myanmar-(Burma) vf 80.994 -0.006 81.001 SEA Philippines cb -73.336 0.006 81.001 SEA Philippines ocr 106.450 0.463 -17.048 SEA Philippines pdr -12.088 -0.682 3.917 SEA Philippines pdr -72.769 -0.190 -72.768 SEA Thailand cb -72.769 -0.491 +3.525 SEA Thailand pdr -35.225 -0.111 -35.329 SEA Thailand pdr -52.75 -0.366 61.19 SEA Thailand pdr -52.75 -0.366 61.19 SEA Thailand pdr	SEA	Myanmar-(Burma)	gro	-24.223	0.622	-24.947
SEA Myanmar-(Burma) osd -6.30 -0.049 -6.472 SEA Myanmar-(Burma) pfb -5.726 -0.068 -8.647 SEA Myanmar-(Burma) vf 80.944 -0.068 -8.647 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines cb -73.336 0.0431 106.301 SEA Philippines cb -72.769 -0.362 74.373 SEA Thailand cb -72.769 -0.190 -72.585 SEA Thailand cc -73.20 153 -17.352 SEA Thailand cc -74.765 -0.236 -72.585 SEA Thailand cc -72.765 -0.366 -72.950 SEA Thailand pdr -35.25 0.111 -35.329 SEA Thailand pdr -17.75	SEA	Myanmar-(Burma)	ocr	116 840	-0.018	116 860
SEA Myanmar-(Burna) pdf -12.396 -0.049 -12.374 SEA Myanmar-(Burna) pdf -8.726 -0.068 -8.477 SEA Myanmar-(Burna) vf 80.994 -0.066 81.001 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines ocr 106.450 0.141 106.318 SEA Philippines pdf -21.088 -0.688 -20.333 SEA Philippines pdf -21.088 -0.688 -23.967 SEA Thailand cb -72.769 -0.190 -72.565 SEA Thailand cb -72.705 -0.314 8.4315 SEA Thailand pdb 8.129 -0.341 8.488 SEA Thailand pdf -35.225 0.111 -35.329 SEA Vietnam cb -72.705 -0.346 66.199 SEA Vietnam cb -35	SEA	Magannar (Burma)		6 520	-0.010	6 479
SEA Myanmar-(Burma) pdr -12.396 -0.019 -12.374 SEA Myanmar-(Burma) vf 80.994 -0.006 81.001 SEA Philippines cb -73.360 0.067 -73.402 SEA Philippines or 106.450 0.141 106.301 SEA Philippines ord -16.591 0.463 -17.048 SEA Philippines pdr -21.088 -0.688 -20.363 SEA Philippines pdb 4.275 0.362 74.373 SEA Thailand gro -17.732 0.153 -17.955 SEA Thailand gro -17.732 0.153 -17.955 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -72.705 0.236 -72.950 SEA Vietnam gro -10.749 0.268 -10.996 SEA Vietnam ocr 82.920 0.314 8.484 SEA Vietnam ocr -10.749 <td>SEA</td> <td>Myanmar-(Burma)</td> <td>osa</td> <td>-0.550</td> <td>-0.049</td> <td>-0.472</td>	SEA	Myanmar-(Burma)	osa	-0.550	-0.049	-0.472
SEA Myanmar-(Burma) pfb -8.726 -0.068 -8.647 SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines gro -20.019 0.641 -20.700 SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines pdr -21.088 -0.688 -23.033 SEA Philippines pdr -21.088 -0.688 -23.033 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -55.30 -73.1 -0.0148 -24.950 SEA Vietnam cb -72.705 0.236 -72.31 -10.014 SEA Vietnam	SEA	Myanmar-(Burma)	pdr	-12.396	-0.019	-12.374
SEA Myamar-(Burma) vf 80.944 -0.006 81.001 SEA Philippines cb -73.340 0.067 -73.402 SEA Philippines ord 16.591 0.641 -20.700 SEA Philippines pdf -21.088 -0.688 -20.363 SEA Philippines pdf -27.769 -0.902 74.473 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -77.732 0.153 -17.955 SEA Thailand ccr 84.052 0.249 84.315 SEA Thailand pdf -35.225 0.111 -35.329 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam ccf -72.705 0.236 -72.950 SEA Vietnam pdf -16.178 -0.085 -10.040 SEA Vietnam pdf -30.431 8.	SEA	Myanmar-(Burma)	pfb	-8.726	-0.068	-8.647
SEA Philippines cb -73.336 0.067 -73.402 SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines pdr -21.088 -0.688 -20.363 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 0.190 -72.568 SEA Thailand ocr 84.052 0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -35.225 0.111 -35.329 SEA Vietnam cr -72.750 0.236 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr 16.178 -0.085 -16.092 SEA Vietnam pdr 16.479 0.196 <td>SEA</td> <td>Myanmar-(Burma)</td> <td>vf</td> <td>80.994</td> <td>-0.006</td> <td>81.001</td>	SEA	Myanmar-(Burma)	vf	80.994	-0.006	81.001
SEA Philippines gro -20.019 0.641 -20.700 SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines pdr -21.088 -0.688 -20.303 SEA Philippines pdr -21.088 -0.688 -20.303 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -65.975 -0.136 66.119 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.0	SEA	Philippines	ch	-73 336	0.067	-73 402
SEA Fullippines ocd 106.450 0.041 106.310 SEA Philippines pdf -20.038 -0.088 -20.0363 SEA Philippines pdf -21.088 -0.088 -20.0363 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand cc -17.732 0.153 -17.955 SEA Thailand cc -72.769 -0.301 -26.520 SEA Thailand cc cc -72.575 0.136 -66.179 SEA Thailand cc cc -72.705 0.236 -72.350 SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam cc -9.253 0.731 -10.014 SEA Vietnam pdf -16.178 -0.085 -16.092 SEA Vietnam pdf	SEA	Philipping	600 (770)	20.010	0.641	20.700
SEA Philippines ocr 106.450 0.141 106.310 SEA Philippines pdr -21.088 -0.683 -20.363 SEA Philippines pdr -21.088 -0.682 3.917 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand odd -27.154 -0.601 -26.520 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam ccr 82.920 0.452 82.450 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.055 -16.092 SEA Vietnam pdr -100.000 -0.547 <td>SEA</td> <td>Finippines</td> <td>gro</td> <td>-20.019</td> <td>0.041</td> <td>-20.700</td>	SEA	Finippines	gro	-20.019	0.041	-20.700
SEA Philippines odd -16.591 0.463 -17.048 SEA Philippines pfb 4.275 0.362 3.917 SEA Philippines vf 74.453 0.082 74.373 SEA Thailand gro -72.769 -0.190 -72.568 SEA Thailand gro -77.732 0.153 -17.955 SEA Thailand ocd 27.154 -0.601 -26.520 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam gro -10.749 0.268 -10.996 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr 30.43 0.204 32.830 SEA Vietnam pdr 126.090 0.652 124.360 SIS Cuba gro -100.000 -16.782	SEA	Philippines	ocr	106.450	0.141	106.310
SEA Philippines pdr -21.088 -0.688 -20.363 SEA Philippines pdr 74.453 0.082 74.373 SEA Thailand cb 72.769 -0.190 -72.568 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand ocr 84.052 -0.341 8.488 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -65.975 -0.366 66.119 SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam ocr 82.92 0.452 82.450 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr 16.178 -0.085 -16.02 SEA Vietnam pdr 126.090 0.521 <td< td=""><td>SEA</td><td>Philippines</td><td>osd</td><td>-16.591</td><td>0.463</td><td>-17.048</td></td<>	SEA	Philippines	osd	-16.591	0.463	-17.048
SEA Philippines pfb 4.275 0.362 3.917 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand gro -17.732 0.153 -17.955 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -35.725 0.236 -66.119 SEA Thailand pdr -65.75 -0.36 66.119 SEA Vietnam gro -10.749 0.268 -10.996 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam vf 69.275 -10.36 69.275 SIS Cuba gro -100.000 -0.577 -100.000 SEA Vietnam vf -16.778 -0.079	SEA	Philippines	pdr	-21.088	-0.688	-20.363
SEA Philippines vf 74.453 0.082 74.373 SEA Thailand cb -72.769 -0.190 -72.568 SEA Thailand gro -17.732 0.153 -17.955 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -45.225 0.111 -35.329 SEA Thailand pdr -57.2705 0.236 -72.950 SEA Vietnam cr 82.20 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr 13.043 0.204 32.830 SEA Vietnam pdr 126.090 0.652 124.360 SIS Cuba cr -100.000 -518 -100.000 SIS Cuba pdr 126.090 0.652 124.	SEA	Philippines	pfb	4.275	0.362	3.917
SEA Thailand cb 72.769 -0.190 -72.568 SEA Thailand or -17.732 0.153 -17.955 SEA Thailand or 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam or 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam vf 69.479 -0.079 -6.782 SIS Cuba gro -100.000 -547 -100.000 SIS Cuba pdr -16.701 -0.77 -100.000 SIS Cuba pdr -126.090 0.652 -124.360 <td>SEA</td> <td>Philippines</td> <td>vf</td> <td>74 453</td> <td>0.082</td> <td>74 373</td>	SEA	Philippines	vf	74 453	0.082	74 373
SEA I hailand co -72.709 -0.190 -72.508 SEA Thailand go -77.732 0.153 -17.955 SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pdr -52.255 0.136 66.119 SEA Vietnam cb -72.705 0.236 -10.996 SEA Vietnam cb -72.705 0.228 -72.950 SEA Vietnam cd -9253 0.731 -10.014 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -100.000 0.547 -100.000 SIS Cuba pdr 126.990 0.652 124.360 SIS Cuba pdr -100.000 0.547 -100.000 SIS Cuba pd	ODA CEA	The lead	-1	79.700	0.004	70 500
SEA Thailand gro -17.732 0.153 -17.955 SEA Thailand ocd -27.154 -0.601 -26.520 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pfb 8.129 -0.341 8.488 SEA Vietnam cb -72.755 -0.236 -72.950 SEA Vietnam gro -10.749 0.286 -10.996 SEA Vietnam ocd -9.233 0.731 -10.014 SEA Vietnam ocd -9.233 0.731 -10.014 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.79 -0.100 0.264 32.830 SIS Cuba cro -100.000 0.554 -100.000 SIS Cuba cro -100.000 -521 -100.000 SIS <td< td=""><td>SEA</td><td>Inailand</td><td>CD</td><td>-72.769</td><td>-0.190</td><td>-72.568</td></td<>	SEA	Inailand	CD	-72.769	-0.190	-72.568
SEA Thailand ocr 84.052 -0.249 84.315 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pfb 8.129 -0.341 8.488 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam gro -10.749 0.268 -10.996 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam ocr 6.979 -0.085 -16.092 SEA Vietnam vf 69.479 0.0652 124.360 SIS Cuba gro -100.000 $-51.474.360$ 518 Cuba pfb -100.000 $-32.1-100.000$ 534.433 131 -93.443 534.433 133 -93.433 534.433 534.433 534.433 534.433 53.146 53.146	SEA	Thailand	gro	-17.732	0.153	-17.955
SEA Thailand ord -27.154 -0.601 -26.520 SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pfb 8.129 -0.341 8.488 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam cb -72.755 0.236 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.085 -16.092 SIS Cuba cb -6.979 -0.079 -6.782 SIS Cuba ocr -100.000 0.547 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr -16.701 -0.078 -16.508 SSA Cameroon csd -100.000 -331 -100.000 </td <td>SEA</td> <td>Thailand</td> <td>ocr</td> <td>84.052</td> <td>-0.249</td> <td>84.315</td>	SEA	Thailand	ocr	84.052	-0.249	84.315
SEA Thailand pdr -35.225 0.111 -35.329 SEA Thailand pfb 8.129 -0.341 8.488 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam gro -10.749 0.268 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -10.014 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.797 -0.79 -6.782 SIS Cuba gro -100.000 -0.547 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr	SEA	Thailand	osd	-27.154	-0.601	-26.520
Ex. Immunic pin 0.320 0.341 8.488 SEA Thailand yf 65.975 -0.136 66.119 SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam odd -9.253 0.731 -10.014 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 -0.078 -16.508 SA Cameroon ccr -100.000 -321 -100.000 SSA Cameroon ocr -100.000 -3443 1.31	SEA	Thailand	ndr	-35 225	0.111	-35 329
SEA Infinitial pro 6.129 -0.341 6.488 SEA Thailand vf 65.975 -0.136 66.119 SEA Vietnam gro -10.749 0.268 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam odd -9.253 0.731 -10.014 SEA Vietnam odd -0.085 -16.092 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 -0.417 -100.000 SIS Cuba gro -100.000 -0.321 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.436 SSA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon gro -100.000 -2.015 -100.000 <	SEA	Thailand		-33.223	0.111	- 33.323
SEA Thailand vi 65.973 -0.136 66.119 SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr 3.043 0.204 32.830 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba ct -6.797 -0.079 -6.782 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba vf r<16.701	SEA	Inaliand	pip	8.129	-0.341	8.488
SEA Vietnam cb -72.705 0.236 -72.950 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -6.979 -0.079 -6.782 SIS Cuba cb -6.979 -0.079 -6.782 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 1100.000 0.321 1100.000 SSA Cameroon cgr <	SEA	Thailand	vf	65.975	-0.136	66.119
SEA Vietnam gro -10.749 0.268 -10.996 SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.085 -16.925 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba gro -100.000 -0.521 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon odr -100.000 -3.21 -100.000 SSA Cameroon pdr -100.000 -7.42 -100.000 SSA Cameroon <td>SEA</td> <td>Vietnam</td> <td>cb</td> <td>-72.705</td> <td>0.236</td> <td>-72.950</td>	SEA	Vietnam	cb	-72.705	0.236	-72.950
SEA Vietnam ocr 82.920 0.452 82.450 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba cb -6.979 -0.079 -6.782 SIS Cuba ocr -100.000 -0.547 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba vf -16.701 -0.078 -100.000 SIS Cuba vf -16.701 -0.078 -100.000 SSA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon vf <td>SEA</td> <td>Vietnam</td> <td>gro</td> <td>-10.749</td> <td>0.268</td> <td>-10.996</td>	SEA	Vietnam	gro	-10.749	0.268	-10.996
SEA Vietnam osd -9.253 0.731 -10.014 SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pfb 33.043 0.204 32.830 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr 126.090 0.652 120.000 SSA Cameroon pdr	SEA	Vietnam	ocr	82 920	0.452	82 450
SEA Vietnam pdr -16.178 -0.085 -16.092 SEA Vietnam pfb 33.043 0.204 32.830 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba cb -6.979 -0.079 -6.782 SIS Cuba ocr -100.000 -0.116 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pdr -16.701 -0.078 -16.508 SSA Cameroon gro -100.000 -2.315 -100.000 SSA Cameroon gro -100.000 -2.325 -100.000 SSA Cameroon gro -100.000 -1.325 -100.000 SSA Cameroon pdr 100.000 -0.752 -100.000 SSA Cameroon pdr 51.466 0.315 55.146 SSA Cameroon vff 55.146 0.000 <td< td=""><td>SEA</td><td>Visteren</td><td></td><td>0.252</td><td>0.721</td><td>10.014</td></td<>	SEA	Visteren		0.252	0.721	10.014
SEA Vietnam pdf -10.178 -10.085 -16.092 SEA Vietnam pfb 33.043 0.204 32.830 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba pdr -126.090 0.652 124.360 SIS Cuba pdr -16.701 -0.078 -16.508 SA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon grd -100.000 $-4.65.98$ -100.000 SSA Cameroon yfb -100.000 -0.752 -100.000 SSA Cameroon yfb -100.000 -7.718 -100.000 SSA Came	SEA	Vietnam	osa	-9.200	0.731	-10.014
SEA Vietnam pfb 33.043 0.204 32.830 SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 -0.517 -100.000 SIS Cuba ocr -100.000 -0.116 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pfb -100.000 -0.321 -100.000 SIS Cuba vf -16.701 -0.078 -16.508 SSA Cameroon gro -100.000 1.311 -93.443 SSA Cameroon gro -100.000 1.311 -93.443 SSA Cameroon gro -100.000 1.3404 -100.000 SSA Cameroon pfb -100.000 0.752 -100.000 SSA Cameroon vft 55.146 0.315 55.146 SSA Cameroon vft 55.146 0.315	SEA	Vietnam	pdr	-16.178	-0.085	-16.092
SEA Vietnam vf 69.479 0.196 69.275 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba ocr -100.000 0.652 124.360 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba vf -16.701 -0.078 -16.508 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 -2.015 -100.000 SSA Cameroon ocr -100.000 -3.3443 -100.000 SSA Cameroon ocr -100.000 -1.3444 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon vf 55.146 0.3144 -100.000 SSA Central-African-Republic gro -100.000 -7.718 -100.000 SSA	SEA	Vietnam	pfb	33.043	0.204	32.830
SIS Cuba cb -6.979 -0.079 -6.782 SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba ocr -100.000 -0.116 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba vf -16.701 -0.078 -165.08 SA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 1.391 -100.000 SSA Cameroon ocr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon wh 0.000 0.744 -100.000 SSA Central-African-Republic cr -100.000 1.184 -100.000 SSA Central-African-Republic pdr -100.000	SEA	Vietnam	vf	69.479	0.196	69.275
SIS Cuba gro -100.000 0.547 -100.000 SIS Cuba ocr -100.000 -0.116 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pfr -16.701 -0.078 -165.08 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 -2.015 -100.000 SSA Cameroon ocr -100.000 -0.752 -100.000 SSA Cameroon pfb -100.000 -0.752 -100.000 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon vf 55.146 0.315 55.146 SSA Central-African-Republic cb -100.000 0.744 -100.000 SSA Central-African-Republic ocd -100.000 0.922 -100.000 SSA Central-African-Republic pdr	SIS	Cuba	ch	-6.979	-0.079	-6 782
313 Cuba g10 -100.000 0.347 -100.000 SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pfb -100.000 -0.321 -100.000 SIS Cuba vf -16.701 -0.078 -165.08 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 1.391 -100.000 SSA Cameroon ocr -100.000 4.695 -100.000 SSA Cameroon pdr -100.000 4.695 -100.000 SSA Cameroon pdr 55.146 0.315 55.146 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon wh 0.000 0.744 -100.000 SSA Central-African-Republic ocr -100.000 1.184 -100.000 SSA Central-African-Republic pdr -100.000 1.184 -100.000	SIC	Cuba	600 (770)	100,000	0.547	100.000
S1S Cuba ofr -100.000 -0.116 -100.000 S1S Cuba pfb -100.000 -0.521 -100.000 S1S Cuba vf -16.701 -0.078 -16.508 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 -2.015 -100.000 SSA Cameroon ocr -100.000 -391 -100.000 SSA Cameroon ocr -100.000 -391 -100.000 SSA Cameroon pfb -100.000 -0.752 -100.000 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon wh 0.000 0.714 -100.000 SSA Central-African-Republic cr -100.000 0.744 -100.000 SSA Central-African-Republic pdr -100.000 0.718 -100.000 <td< td=""><td>515</td><td>Cuba</td><td>gro</td><td>-100.000</td><td>0.347</td><td>-100.000</td></td<>	515	Cuba	gro	-100.000	0.347	-100.000
SIS Cuba pdr 126.090 0.652 124.360 SIS Cuba pfb -100.000 -0.321 -100.000 SIS Cuba vf -16.701 -0.078 -165.08 SSA Cameroon gro -100.000 -2.015 -100.000 SSA Cameroon ocr -100.000 4.695 -100.000 SSA Cameroon ocr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon wfb -100.000 0.000 0.000 SSA Cameroon wfb -100.000 0.744 -100.000 SSA Central-African-Republic gro -100.000 -7.718 -100.000 SSA Central-African-Republic pdr -100.000 1.982 -100.000 SSA Central-African-Republic	SIS	Cuba	ocr	-100.000	-0.116	-100.000
SIS Cuba pfb -100.000 -0.321 -100.000 SIS Cuba vf -16.701 -0.078 -16.508 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon ocr -100.000 -2.015 -100.000 SSA Cameroon ocr -100.000 4.695 -100.000 SSA Cameroon osd -100.000 -0.752 -100.000 SSA Cameroon pfb -100.000 -0.752 -100.000 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon wh 0.000 0.744 -100.000 SSA Central-African-Republic cr -100.000 -7.18 -100.000 SSA Central-African-Republic ocr -100.000 -0.89 -100.000 SSA Central-African-Republic pfb <td>SIS</td> <td>Cuba</td> <td>pdr</td> <td>126.090</td> <td>0.652</td> <td>124.360</td>	SIS	Cuba	pdr	126.090	0.652	124.360
SIS Cuba vf -16.701 -0.078 -16.508 SSA Cameroon cb -93.443 1.131 -93.443 SSA Cameroon gro -100.000 2.015 -100.000 SSA Cameroon ocr -100.000 1.391 -100.000 SSA Cameroon odr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon pdr -100.000 -0.752 -100.000 SSA Cameroon wht 0.000 0.000 0.000 SSA Cameroon wht 0.000 0.000 0.000 SSA Central-African-Republic gro -100.000 -7718 -100.000 SSA Central-African-Republic odd -100.000 1.184 -100.000 SSA Central-African-Republic pdr -100.000 1.982 -100.000 SSA Central-African-Republic <td>SIS</td> <td>Cuba</td> <td>pfb</td> <td>-100.000</td> <td>-0.321</td> <td>-100.000</td>	SIS	Cuba	pfb	-100.000	-0.321	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SIS	Cuba	vf	-16.701	-0.078	-16.508
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Cameroon	ch	03 443	1 1 2 1	03 443
SSA Cameroon ocr -100.000 -2.013 -100.000 SSA Cameroon ocr -100.000 4.695 -100.000 SSA Cameroon pdr -100.000 4.695 -100.000 SSA Cameroon pdr -100.000 4.695 -100.000 SSA Cameroon pdr -100.000 13.404 -100.000 SSA Cameroon vf 55.146 0.315 55.146 SSA Cameroon wht 0.000 0.000 0.000 SSA Central-African-Republic cor -100.000 0.744 -100.000 SSA Central-African-Republic ocr -100.000 0.744 -100.000 SSA Central-African-Republic pdr -100.000 0.922 -100.000 SSA Central-African-Republic pdr -100.000 0.922 -100.000 SSA Central-African-Republic pfb -100.000 31.932 -100.000 SSA Central-African-Republic pfb	SSA	Cameroon	CD	100.000	2.015	100.000
SSA Cameroon ocr -100.000 1.391 -100.000 SSA Cameroon odd -100.000 4.695 -100.000 SSA Cameroon pdr -100.000 13.404 -100.000 SSA Cameroon pfb -100.000 13.404 -100.000 SSA Cameroon wht 0.000 0.000 0.000 SSA Cameroon wht 0.000 0.752 -100.000 SSA Cameroon wht 0.000 0.714 -100.000 SSA Central-African-Republic ccr -100.000 0.744 -100.000 SSA Central-African-Republic ocr -100.000 0.922 -100.000 SSA Central-African-Republic pdr -100.000 1.184 -100.000 SSA Central-African-Republic pdr -100.000 31.335 30.000 31.335 SSA Central-African-Republic vf 22.454 22.454 22.454 SSA Congo,-DemRepof-the	SSA	Cameroon	gro	-100.000	-2.015	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Cameroon	ocr	-100.000	1.391	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Cameroon	osd	-100.000	4.695	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Cameroon	pdr	-100.000	-0.752	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Cameroon	nfb	-100.000	13 404	-100.000
SSA Cameroon vit 35.140 0.313 55.140 SSA Cameroon wit 0.000 0.000 0.000 SSA Central-African-Republic cb -100.000 0.744 -100.000 SSA Central-African-Republic ocr -100.000 0.718 -100.000 SSA Central-African-Republic ocr -100.000 0.922 -100.000 SSA Central-African-Republic pdr -100.000 0.922 -100.000 SSA Central-African-Republic pdr -100.000 1.84 -100.000 SSA Central-African-Republic pdr -100.000 1.982 -100.000 SSA Central-African-Republic vf 22.454 0.254 22.454 SSA Congo,-DemRepof-the gro 0.000 0.000 0.000 SSA Congo,-DemRepof-the odd 0.000 0.000 0.000 SSA Congo,-DemRepof-the pdr 0.000 0.000 0.000 SSA C	SGV	Cameroon	pro f	55 146	0.215	55 146
SSA Cameroon wht 0.000 0.000 0.000 SSA Central-African-Republic cb -100.000 0.744 -100.000 SSA Central-African-Republic gro -100.000 0.922 -100.000 SSA Central-African-Republic ocr -100.000 0.922 -100.000 SSA Central-African-Republic odd -100.000 0.922 -100.000 SSA Central-African-Republic pdr -100.000 -0.889 -100.000 SSA Central-African-Republic pfb -100.000 -0.882 -100.000 SSA Central-African-Republic vfb -100.000 31.982 -100.000 SSA Central-African-Republic vfb -100.000 31.335 33.5 SSA Congo,-DemRepof-the gro 0.000 0.000 0.000 SSA Congo,-DemRepof-the odd 0.000 0.000 0.000 SSA Congo,-DemRepof-the pfb 0.000 0.000 0.000	SSA	Cameroon	VI	35.140	0.315	55.140
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	SSA	Cameroon	wht	0.000	0.000	0.000
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Central-African-Republic	cb	-100.000	0.744	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Central-African-Republic	gro	-100.000	-7.718	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Central-African-Republic	ocr	-100.000	0.922	-100.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Central-African-Bepublic	osd	-100.000	1 184	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	CC A	Control Africa- Daniel	5-1-	100.000	1.104	100.000
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	SSA GGA	Central-African-Republic	par	-100.000	-0.089	-100.000
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	SSA	Central-African-Republic	ptb	-100.000	31.982	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Central-African-Republic	vf	22.454	0.254	22.454
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Congo,-DemRepof-the	$^{\rm cb}$	31.335	0.000	31.335
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	CongoDemRepof-the	gro	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SCA	Congo Dom Bop of the	510	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	DDA CCA	Congo,-DemRepoi-the	ocr	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Congo,-DemRepof-the	osd	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Congo,-DemRepof-the	pdr	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Congo,-DemRepof-the	pfb	0.000	0.000	0.000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Congo,-Dem,-Repof-the	vf	-6.710	0.000	-6.710
SSA Congo,-Repof-the cb -100.000 0.000 -100.000 SSA Congo,-Repof-the cb -100.000 0.000 -100.000 SSA Congo,-Repof-the gro 0.000 0.000 0.000 SSA Congo,-Repof-the ocr 0.000 0.000 0.000 SSA Congo,-Repof-the osd 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya gro -37.290 0.323 -37.656 continued on next page	SSA	Congo Dem Bop of the	wht	0.000	0.000	0.000
SSA Congo,-Repof-the co -100.000 0.000 -100.000 SSA Congo,-Repof-the gro 0.000 0.000 0.000 SSA Congo,-Repof-the ocr 0.000 0.000 0.000 SSA Congo,-Repof-the osd 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya gro -37.290 0.323 -37.656 continued on next page	CC A	Congo, Pop -f +b-	ab	100.000	0.000	100.000
SSA Congo,-Repof-the gro 0.000 0.000 0.000 SSA Congo,-Repof-the ocr 0.000 0.000 0.000 SSA Congo,-Repof-the osd 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656	SSA	Congo,-nepoi-tne	CD	-100.000	0.000	-100.000
SSA Congo,-Repof-the ocr 0.000 0.000 0.000 SSA Congo,-Repof-the osd 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656	SSA	Congo,-Repof-the	gro	0.000	0.000	0.000
SSA Congo,-Repof-the osd 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656	SSA	Congo,-Repof-the	ocr	0.000	0.000	0.000
SSA Congo,-Repof-the pdr 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656	SSA	Congo,-Repof-the	osd	0.000	0.000	0.000
SSA Congo,-Repof-the put 0.000 0.000 0.000 SSA Congo,-Repof-the vf 3.467 0.000 3.467 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656	SSA	Congo -Bep of the	ndr	0.000	0.000	0.000
SSA Congo,-nepor-me vi 3.407 0.000 3.407 SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656 continued on next page	SCA	Congo Bop of the	pui vf	3 167	0.000	3 167
SSA Kenya cb 90.098 -0.081 90.217 SSA Kenya gro -37.290 0.323 -37.656 continued on next page	SSA GG	Congo,-mepoi-me	V1	5.407	0.000	0.407
SSA Kenya gro -37.290 0.323 -37.656 continued on next page	SSA	Kenya	cb	90.098	-0.081	90.217
continued on next page	SSA	Kenya	gro	-37.290	0.323	-37.656
	-	contir	nued on n	ext page		

Simulated %-changes in allocated area: 1997 - 2050, continued

SSA Kenya ocr -100.000 -0.465 -100.000 SSA Kenya odd -32.864 -1.570 -30.557 SSA Kenya pdb -43.665 -1.141 -45.677 SSA Kenya pdb -48.665 -1.211 -92.730 SSA Kenya vft -92.434 -0.201 92.730 SSA Liberia cb replanted 0.000 replanted -0.000 0.000 SSA Liberia cf 169.150 4.912 164.590 SSA Mozambique ccr -73.682 -0.042 -4.178 SSA Mozambique odr -18.877 -0.056 -30.968 SSA Mozambique vht -30.972 -0.065 -30.988 SSA Mozambique vht -30.972 -0.065 -30.988 SSA Mozambique vht -30.972 -0.065 -30.988 SSA Mozambique vh	Region	country	crop	scenario A	schearlo B	scenario C
SSA Kenya ocr -100.000 -0.465 -100.000 SSA Kenya pdr -40.897 0.148 -40.099 SSA Kenya pdr -40.897 0.148 -40.099 SSA Kenya vh 100.000 -4.772 100.000 SSA Liberia ocr -0.000 -0.000 -0.000 SSA Liberia odr -7.53.068 -0.049 -3.28.16 SSA Liberia vf 160.150 4.912 164.595 SSA Mozambique gro -4.219 -0.042 -4.178 SSA Mozambique odr -1.5682 -0.036 18.863 SSA Mozambique pdr -1.7590 -0.672 -18.258 SSA Mozambique vh -8.047 -0.049 -8.053 SSA Mozambique vh -8.059 -0.016 -3.8073 SSA Mozambique vh -8.0973 -0.0000				%	%	%
SSA Kenya ord -4.28.864 -1.570 -30.557 SSA Kenya pfb -68.065 -1.741 -65.507 SSA Kenya yf 92.434 -0.201 92.730 SSA Liberia cdr replanted 0.000 replanted SSA Liberia cdr 0.000 0.000 0.22.816 SSA Liberia cdr 1.61.050 -0.012 1.45.500 SSA Mozambique cdr -75.682 -0.024 -75.658 SSA Mozambique pdf -1.15.676 -0.036 1.8.863 SSA Mozambique pdf -1.15.676 -0.024 -7.5.682 SSA Mozambique vff -8.04.37 -0.036 1.8.863 SSA Mozambique vff -10.0000 -1.32 -100.000 SSA Mozambique vff -8.04.37 -0.065 -30.908 SSA Nigeria cdr -100.0000	SSA	Kenya	ocr	-100.000	-0.465	-100.000
SSA Kenya pdr -40.897 0.148 -40.699 SSA Kenya vf 92.434 -0.201 92.730 SSA Kenya wft 10.0000 -4.772 -100.000 SSA Liberia cb replanted 0.000 replanted SSA Liberia pdr -33.968 -0.969 -32.816 SSA Liberia pdr -17.89 -0.016 65.253 SSA Mozambique cpr -1.212 -0.042 -1.78 SSA Mozambique opt -1.7500 0.672 -18.258 SSA Mozambique pdr -1.7500 0.672 -19.620 SSA Mozambique pdr -10.000 -0.033 -100.000 SSA Mozambique pdr -10.000 -0.033 -100.000 SSA Nigeria gro -100.000 -0.033 +00.000 SSA Nigeria opdr -100.000 -0.033 +00.000 SSA Nigeria opdr +10.000	SSA	Kenya	osd	-32.864	-1.570	-30.557
SSA Kenya pfb -68.065 -1.741 -65.507 SSA Kenya wht -100.000 -4.772 -100.000 SSA Liberia ocr 0.000 0.000 -0.000 SSA Liberia ocr 0.000 0.000 0.000 SSA Liberia odr 169.150 4.912 164.590 SSA Liberia odr 169.150 4.912 164.590 SSA Mozambique gro -4.219 -0.042 -4.178 SSA Mozambique odd 1.827 -0.036 1.8663 SSA Mozambique vf -88.043 -0.006 -88.052 SSA Mozambique vf -88.043 -0.0073 -100.000 SSA Nigeria cdr -100.000 -1.033 -100.000 SSA Nigeria odr -100.000 -1.01.000 -6.646 SSA Nigeria vf 86.378 0.033	SSA	Kenya	pdr	-40.897	0.148	-40.699
SSA Kenya rf 92.434 -0.201 92.730 SSA Liberia cb replanted 0.000 replanted SSA Liberia cb replanted 0.000 replanted SSA Liberia pdr -33.968 -0.969 -32.816 SSA Mozambique cb 65.239 -0.016 65.255 SSA Mozambique ocr -75.682 -0.024 -4.178 SSA Mozambique pdr -17.509 0.672 -18.258 SSA Mozambique pdr -10.030 18.863 -0.024 -4.178 SSA Mozambique pdr -10.000 -0.037 -18.269 SSA Migeria gro -4.219 -0.065 -6.074 -0.17 68.074 SSA Migeria gro -10.000 -0.323 -100.000 -0.000 -0.33 -100.000 -0.33 -100.000 SSA Nigeria pdr -100.000 -0.33 -100.000 -0.055 -5.533 -0.065 -5.287 -0.5	SSA	Kenya	pfb	-68.065	-1.741	-65.507
SSA Kenya wht -100.000 -4.772 -100.000 SSA Liberia ocr 0.000 0.000 0.000 SSA Liberia ocr 0.000 0.000 0.000 SSA Liberia orf 169.150 4.912 164.590 SSA Mozambique cb 65.239 -0.012 -4.175 SSA Mozambique ocr -7.5682 -0.034 -7.5558 SSA Mozambique pdr -1.7590 0.672 -1.8258 SSA Mozambique pdr -1.7590 0.672 -1.8258 SSA Mozambique wht -30.972 -0.065 -30.908 SSA Nigeria gro -100.000 0.333 -100.000 SSA Nigeria ocr -100.000 0.733 -100.000 SSA Nigeria ocr -100.000 0.733 -100.000 SSA Nigeria ocr -100.000 0.646 <td>SSA</td> <td>Kenva</td> <td>vf</td> <td>92.434</td> <td>-0.201</td> <td>92.730</td>	SSA	Kenva	vf	92.434	-0.201	92.730
SSA Liberia cb replanted 0.000 replanted SSA Liberia pdr -33.968 -0.969 -32.816 SSA Liberia pdr -33.968 -0.969 -32.816 SSA Mozambique cb 65.239 -0.016 65.255 SSA Mozambique ocr -75.682 -0.024 -75.658 SSA Mozambique pdr -17.500 0.672 -18.258 SSA Mozambique pdr -17.570 0.672 -18.258 SSA Mozambique vf 88.043 -0.009 88.052 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria pdr -100.000 -1.921 -100.000 SSA Nigeria pdr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 <td< td=""><td>SSA</td><td>Kenya</td><td>wht</td><td>-100.000</td><td>-4 772</td><td>-100.000</td></td<>	SSA	Kenya	wht	-100.000	-4 772	-100.000
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	SEA	Liborio	ab	replanted	0.000	replanted
SSA Liberia opfr 0.300 0.000 0.000 0.000 SSA Liberia vf 169.150 4.912 164.590 SSA Mozambique gro -4.549 -0.012 -4.558 SA Mozambique gro -4.549 -0.024 -4.558 SSA Mozambique opd -18.827 -0.057 -19.676 SSA Mozambique opd -19.676 -0.067 -19.620 SSA Mozambique vf 88.043 -0.009 88.052 SSA Mozambique vf 88.043 -0.009 88.052 SSA Nigeria opd -100.000 -1.93 -100.000 SSA Nigeria opd -100.000 -1.03 -100.000 SSA Nigeria pfb -100.000 -1.04 -100.000 SSA Nigeria pdf -83.78 0.093 86.378 SSA Nigeria vf 86.378	GGA	Liberia	CD	n ooo	0.000	n ooo
SSA Liberia pdr -33.968 -0.969 -32.816 SSA Liberia vf 651.50 4.912 164.590 SSA Mozambique cb 652.33 -0.016 652.255 SSA Mozambique ocf -75.682 -0.024 -75.658 SSA Mozambique pdr -17.500 0.672 -18.253 SSA Mozambique vf 88.043 -0.005 -30.903 SSA Mozambique vf 88.043 -0.006 88.053 SSA Mozambique vf 88.044 -0.007 -80.933 SSA Nigeria or -100.000 1.033 -100.000 SSA Nigeria orf -100.000 6.464 -100.000 SSA Nigeria vf 8.6378 0.938 8.378 South-Africa cb 7.87.81 -0.088 8.704 SSA South-Africa pfb -50.593 -1.366	SSA	Liberia	ocr	0.000	0.000	0.000
SSA Liberia vf 169.150 4.912 164.595 SSA Mozambique gro -4.219 -0.042 -4.178 SSA Mozambique ocr -75.682 -0.024 -4.178 SSA Mozambique pdr -17.590 0.036 18.863 SSA Mozambique pdr -19.756 -0.057 -18.258 SSA Mozambique vf 88.043 -0.065 -30.908 SSA Migeria cb 68.974 0.117 68.974 SSA Migeria ocr -100.000 -1.931 -100.000 SSA Nigeria ocr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 -0.064 -100.000 SSA South-Africa cb 8.754 -0.058 8.378 South-Africa pdr -3.2789 0.180	SSA	Liberia	pdr	-33.968	-0.969	-32.816
SSA Mozambique cb 65.239 -0.016 65.278 SSA Mozambique ocr -75.682 -0.024 -75.658 SSA Mozambique pdr -17.590 0.672 -18.258 SSA Mozambique pdr -17.590 0.672 -18.258 SSA Mozambique vf 88.043 -0.009 88.052 SSA Mozambique vf 88.043 -0.009 88.052 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria ocr -100.000 -1.03 -100.000 SSA Nigeria pdr -100.000 -1.03 -100.000 SSA Nigeria vf 86.378 0.093 86.378 SSA Nigeria vf 86.378 0.093 86.378 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa pdr -32.789 0.180 </td <td>SSA</td> <td>Liberia</td> <td>vf</td> <td>169.150</td> <td>4.912</td> <td>164.590</td>	SSA	Liberia	vf	169.150	4.912	164.590
SSA Mozambique gro -4.219 -0.042 -4.75.658 SSA Mozambique ocr -75.682 -0.024 -75.658 SSA Mozambique pdr -17.590 0.036 18.863 SSA Mozambique pfb -19.750 0.0672 -18.258 SSA Mozambique vf 88.043 -0.009 -330.902 SSA Migeria cb 68.974 0.117 68.974 SSA Nigeria ocr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 -1.931 -100.000 SSA Nigeria pdr -100.000 -1.931 -100.000 SSA Nigeria wh 0.000 0.000 0.000 SSA South-Africa cb 87.581 -0.174 16.455 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -50.593	SSA	Mozambique	cb	65.239	-0.016	65.255
SSA Mozambique oct -75.682 -0.024 -75.658 SSA Mozambique pdr -17.590 0.672 -18.258 SSA Mozambique pfb -19.676 -0.057 -18.258 SSA Mozambique vft 88.043 -0.009 88.052 SSA Mozambique vft 88.043 -0.009 88.052 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria oct -100.000 -0.323 -100.000 SSA Nigeria pdfb -100.000 -1.031 -100.000 SSA Nigeria pdfb -100.000 -6.464 -0.88 87.704 SSA Sigeria vft 86.378 0.093 86.378 SSA South-Africa cft -97.050 -0.767 -96.246 SSA South-Africa pdf -32.789 0.180 -32.860 SSA South-Africa vft 99.	SSA	Mozambique	gro	-4.219	-0.042	-4.178
SSA Mozambique pdr -17.590 0.672 -18.258 SSA Mozambique pdr -19.676 -0.057 -19.620 SSA Mozambique vf 88.043 -0.009 88.052 SSA Mozambique vh -30.972 -0.065 -30.908 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria ocr -100.000 -1.03.33 -100.000 SSA Nigeria pdr -100.000 -1.00.000 SSA Nigeria vf 86.378 Systa Nigeria vf 86.378 0.003 86.378 Sath-Africa cb 87.581 -0.088 87.704 SSA South-Africa odr -97.057 -0.016 -43.683 SSA South-Africa pdr -32.783 -0.181 99.4265 SSA South-Africa pdr -32.783 -0.181 99.4265 SSA South-Africa<	SSA	Mozambique	ocr	-75.682	-0.024	-75.658
SSA Mozambique pfb -17, 500 0.672 -18.258 SSA Mozambique pfb -19.676 -0.065 -3.0.908 SSA Mozambique wf -80.972 -0.065 -3.0.908 SSA Nigeria gro -100.000 -0.323 -100.000 SSA Nigeria ocr -100.000 0.733 -100.000 SSA Nigeria odd -100.000 1.031 -100.000 SSA Nigeria odd -100.000 1.091 -100.000 SSA Nigeria wft 6.3.78 0.003 86.378 SSA Nigeria wft 6.3.78 0.000 86.378 SA South-Africa cb 97.01 0.296 -2.387 SSA South-Africa odd 1.5.457 -0.714 1.6455 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -50.533 1.366 -46.843 SSA South-Africa vf 99.035	SSA	Mozambique	osd	18 827	-0.036	18 863
SSA Mozambique ph 1.9.676 0.007 1.9.676 SSA Mozambique vf 88.043 -0.007 -13.620 SSA Mozambique vf 88.043 -0.007 -33.908 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria ocr -100.000 0.323 -100.000 SSA Nigeria ocf -100.000 0.733 -100.000 SSA Nigeria pfb -100.000 6.646 -100.000 SSA Nigeria pfb -100.000 6.646 -100.000 SSA Nigeria vf 8.6378 0.033 86.378 SSA South-Africa gro -1.571 0.296 -2.387 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pfb -32.789 0.180 +32.680 SSA South-Africa vf 99.351 <	SSA	Mozambique	ndr	17 590	0.672	18 258
DSA Mozambique ph 1.5.010 -0.001 -1.5.010 SSA Mozambique vh -30.972 -0.055 -30.908 SSA Nigeria gro -100.000 -0.323 -100.000 SSA Nigeria occ -100.000 1.193 -100.000 SSA Nigeria ocd -100.000 -1.033 -100.000 SSA Nigeria pdr -100.000 -1.033 -100.000 SSA Nigeria pdr -100.000 -1.033 86.378 SSA Nigeria wh 0.000 0.000 0.000 SSA South-Africa cb 67.51 -0.714 16.455 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -50.533 1.366 -48.683 SSA South-Africa vf 99.035 -0.040 -92.900 SSA South-Africa vf 99.361	SCA	Mozambique	pui	10.676	0.072	10.620
SSA Mozambique vit 88.043 -0.009 88.052 SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria cr -100.000 1.117 68.974 SSA Nigeria ocr -100.000 1.133 -1100.000 SSA Nigeria ocr -100.000 0.733 -1100.000 SSA Nigeria pfb -100.000 6.646 -100.000 SSA Nigeria vf 86.378 0.003 86.378 SSA South-Africa gpo -1.971 0.296 -2.387 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pfb -30.78 -30.86 -37.04 SSA South-Africa pfb -30.51 -0.018 -93.480 SSA South-Africa pfb -30.51 -0.010 -92.963 SSA South-Africa whf 99.351	CCA	Mozambique	pib	-19.070	-0.037	-19.020
SSA Mizgria with -30.972 -0.065 -30.908 SSA Nigeria gro -100.000 -0.323 -100.000 SSA Nigeria ocr -100.000 1.193 -100.000 SSA Nigeria ocd -100.000 0.793 -100.000 SSA Nigeria pdr -100.000 -1.09.000 0.646 -100.000 SSA Nigeria vf 86.378 0.003 86.378 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa ocd -1.971 0.296 -2.387 SSA South-Africa pdr -32.789 0.180 -46.683 SSA South-Africa pdr -32.789 0.180 -46.683 SSA South-Africa wht -81.351 0.012 90.328 SSA South-Africa wht -85.13 0.014 -92.900 SSA South-Africa wht </td <td>SSA</td> <td>Mozambique</td> <td>VI</td> <td>88.043</td> <td>-0.009</td> <td>88.052</td>	SSA	Mozambique	VI	88.043	-0.009	88.052
SSA Nigeria cb 68.974 0.117 68.974 SSA Nigeria ocr -100.000 -1.323 -100.000 SSA Nigeria ocr -100.000 1.193 -1100.000 SSA Nigeria pdr -100.000 -1.091 -100.000 SSA Nigeria pdr -100.000 -6.646 -100.000 SSA Nigeria vf 86.378 0.093 86.378 SSA South-Africa gro -1.971 0.296 -2.387 SSA South-Africa odd 15.457 -0.714 16.455 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa vf 99.305 -0.081 99.418 SSA South-Africa vf 99.305 -0.101 90.328 SSA Swaziland ocr -100.000 3.466 -100.000 SSA Swaziland pdr -46.384	SSA	Mozambique	wht	-30.972	-0.065	-30.908
SSA Nigeria gro -100.000 -0.323 -100.000 SSA Nigeria ord -100.000 1.793 -100.000 SSA Nigeria pdr -100.000 -1.793 -100.000 SSA Nigeria pdr -100.000 -6.646 -100.000 SSA Nigeria vf 86.378 0.093 86.378 SSA South-Africa gro -1.971 0.296 -2.387 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -50.53 -1.081 99.418 SSA South-Africa vf 99.305 -0.081 99.418 SSA Swaziland gro -100.000 0.191 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -40.039 0.040 89.017 SSA Swaziland pdr -40.0	SSA	Nigeria	cb	68.974	0.117	68.974
SSA Nigeria ocr -100.000 1.193 -100.000 SSA Nigeria pdr -100.000 -1.091 -100.000 SSA Nigeria pfb -100.000 -6.646 -100.000 SSA Nigeria vf 86.378 0.003 86.378 SSA South-Africa cb 87.551 -0.088 87.704 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdf -32.789 0.180 -32.680 SSA South-Africa pdf -50.593 -1.366 -48.683 SSA South-Africa vf 99.351 0.012 90.328 SSA South-Africa vf 99.051 0.012 90.328 SSA Swaziland ccr -100.000 0.140 +92.903 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -40.3	SSA	Nigeria	gro	-100.000	-0.323	-100.000
SSA Nigeria osd -100.000 0.793 -100.000 SSA Nigeria pfb -100.000 -100.000 SA Nigeria pfb -100.000 -0.031 -100.000 SSA Nigeria vf 86.378 0.093 86.378 SSA Nigeria wh 0.000 0.000 0.000 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa pdr -1.971 0.296 -2.387 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa vf 99.305 -0.081 99.418 SSA Swaziland cb 90.351 0.012 -90.328 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -69.415 0.582 -69.843	SSA	Nigeria	ocr	-100.000	1.193	-100.000
SSA Nigeria pdr -100.000 -1.091 -100.000 SSA Nigeria pfb -100.000 6.646 -100.000 SSA Nigeria wht 0.000 0.000 0.000 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa ord 15.457 -0.714 16.455 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland gcr -100.000 0.140 -92.900 SSA Swaziland gfb -100.000 3.466 -100.000 SSA Swaziland gfb -100.000 3.466 -100.000 SSA Swaziland vft 89.030 0.040 89.017 SSA Swaziland vft 89.0393 </td <td>SSA</td> <td>Nigeria</td> <td>osd</td> <td>-100.000</td> <td>0.793</td> <td>-100.000</td>	SSA	Nigeria	osd	-100.000	0.793	-100.000
SSA Nigeria pfb -100.000 6.646 -100.000 SSA Nigeria vf 86.378 0.093 86.378 SSA Nigeria wht 0.000 0.000 0.000 SSA South-Africa gro -1.9711 0.296 -2.387 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -53.93 -1.366 -48.633 SSA South-Africa wht -81.39 -1.778 -82.637 SSA Swaziland ocr -100.000 $.0110$ -90.328 SSA Swaziland ocr -100.000 $.0110$ -90.328 SSA Swaziland pdr -43.384 1.467 -47.924 SSA Swaziland pdr -40.384 1.467 -96.943 SSA Tanzania, United-Rep. cb 90.400 0.000 SSA	SSA	Nigeria	pdr	-100.000	-1.091	-100.000
SSA Nigeria pro 16.378 0.003 86.378 SSA Nigeria wht 0.000 0.000 0.003 86.378 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdf -32.789 0.180 -32.680 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa wht -85.139 -1.778 -82.637 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdf -46.384 1.467 -47.7924 SSA Swaziland vf 89.030 0.040 89.017 SSA Swaziland vf 89.030 0.040 89.017 SSA Tanzania, United-Rep. c	SSA	Nigeria	pfb	-100.000	6 646	-100.000
DSA Nigeria vi 0.0.373 0.0.373 0.0.373 0.0.000 0.0000 SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa vf 99.305 -0.081 99.418 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cr -10.000 .012 90.328 SSA Swaziland odr -46.384 1.467 -47.924 SSA Swaziland odr -0.000 .000 80.017 SSA Swaziland odr -0.039 90.480 SSA Tanzania,-United-Rep. cb -0.047 -0.039 90.480 SSA Tanzania,-United-Rep.	SEA	Nigoria	pib f	-100.000 96.279	0.040	-100.000 96.279
SSA South-Africa wht 0.000 0.000 0.000 0.000 SSA South-Africa gro -1.971 0.296 -2.387 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -100.000 3.466 -100.000 SSA Swaziland pdr -92.900 89.417 89.033 0.040 89.017 SSA Swaziland pdr -100.000 $-0.69.43$ $58A$ Tanzania, United-Rep. cb -96.933 -71.218	SSA	Nigeria	VI	00.378	0.093	00.370
SSA South-Africa cb 87.581 -0.088 87.704 SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa ocf -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa vf 99.305 -0.081 99.418 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cr -10.000 0.191 -100.000 SSA Swaziland ocf -10.000 3.466 -100.000 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Tanzania, United-Rep. ccf -100.000 -528 -100.000 SSA Tanzania, United-Rep. pfb -100.000 -1.89 -100.000	SSA	Nigeria	wnt	0.000	0.000	0.000
SSA South-Africa gro -1.971 0.296 -2.387 SSA South-Africa ocd -9.7050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa wft 98.139 -1.778 -82.637 SSA South-Africa wft -85.139 -1.778 -82.637 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Tanzania,-United-Rep. cb 90.440 89.017 SSA Tanzania,-United-Rep. pdr	SSA	South-Africa	cb	87.581	-0.088	87.704
SSA South-Africa ocr -97.050 -0.576 -96.246 SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa vf 99.305 -0.081 99.418 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cb 90.328 -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -100.000 3.466 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 89.017 SSA Tanzania,-United-Rep. cb -9.047 -0.039 90.480 SSA Tanzania,-United-Rep. pdr -96.955 -0.057 -96.232 SSA T	SSA	South-Africa	gro	-1.971	0.296	-2.387
SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa wft 99.305 -0.081 99.418 SSA South-Africa wft $e85.139$ -1.778 $e.82.637$ SSA Swaziland cb 90.351 0.012 90.328 SSA Swaziland cr -100.000 0.191 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland wft 0.000 0.000 0.000 SSA Swaziland wft 0.000 0.000 0.000 SSA Tanzania,-United-Rep. cr 100.000 0.528 -69.433 SSA Tanzania,-United-Rep. pdr -96.995 -0.657 -96.232 SSA Tanzania,-United-Rep. pdr -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. wft -100.000 -0.33 <td>SSA</td> <td>South-Africa</td> <td>ocr</td> <td>-97.050</td> <td>-0.576</td> <td>-96.246</td>	SSA	South-Africa	ocr	-97.050	-0.576	-96.246
SSA South-Africa pdr -32.789 0.180 -32.680 SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cb 90.351 0.012 90.328 SSA Swaziland ocr -100.000 0.191 -100.000 SSA Swaziland ocr -100.000 3.466 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 80.00 SSA Tanzania,-United-Rep. cfo 0.407 -0.039 90.480 SSA Tanzania,-United-Rep. pdr -96.95 -0.057 -96.323 SSA Tanzania,-United-Rep. vf 91.110 -0.189 -100.000 SSA Tanzania,-United-Re	SSA	South-Africa	osd	15.457	-0.714	16.455
SSA South-Africa pfb -50.593 -1.366 -48.683 SSA South-Africa wh $+85.139$ -0.081 99.418 SSA Swaziland cb 90.351 0.012 90.328 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland wht 0.000 0.000 0.000 SSA Swaziland wh wh 0.000 0.000 0.000 SSA Swaziland wh wh 0.000 0.000 0.000 SSA Tanzania,-United-Rep. ccr -100.000 -582 -69.843 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. pfb -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. wh -100.000 <td>SSA</td> <td>South-Africa</td> <td>pdr</td> <td>-32.789</td> <td>0.180</td> <td>-32.680</td>	SSA	South-Africa	pdr	-32.789	0.180	-32.680
SSA South-Africa vf 99.305 -0.081 99.418 SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cb 90.351 0.012 90.328 SSA Swaziland ocr -100.000 0.191 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 89.017 SSA Tanzania,-United-Rep. gro -69.415 0.582 -69.843 SSA Tanzania,-United-Rep. gro -100.000 -0.57 -96.232 SSA Tanzania,-United-Rep. pfb -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. vf 91.0000 -0.005	SSA	South-Africa	pfb	-50.593	-1.366	-48.683
SSA South-Africa wht -85.139 -1.778 -82.637 SSA Swaziland cb 90.351 0.012 90.328 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 0.191 -100.000 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 89.017 SSA Tanzania,-United-Rep. cb 90.407 -0.39 90.480 SSA Tanzania,-United-Rep. gro -69.415 0.582 -69.843 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Uganda ccr -82.034 -0.005 -82.034	SSA	South-Africa	vf	99.305	-0.081	99.418
SSA Swaziland who Solution 1.110 90.301 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland ocr -100.000 0.191 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland wht 0.000 0.000 0.000 SSA Tanzania,-United-Rep. cb 90.477 -0.339 90.480 SSA Tanzania,-United-Rep. ocr -100.000 -0.582 -69.843 SSA Tanzania,-United-Rep. pdf -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. vf 91.00.000 -82.034 -82.034 SSA Uganda <td>SSA</td> <td>South-Africa</td> <td>wht</td> <td>-85 139</td> <td>-1 778</td> <td>-82 637</td>	SSA	South-Africa	wht	-85 139	-1 778	-82 637
SNA Swaziland CD 90.301 0.112 90.320 SSA Swaziland gro -92.963 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland wht 0.000 3.466 -100.000 SSA Swaziland wht 0.000 0.000 0.000 SSA Tanzania,-United-Rep. gro -69.415 0.582 -69.843 SSA Tanzania,-United-Rep. ocr -100.000 -528 -100.000 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.322 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. vf 91.00000 -2.842 -100.000 SSA Uganda ccr -100.000 -0.033 -100.000	SSA	Swagiland	ab	-00.251	-1.770	-02.007
SSA Swaziland gro -92.903 -0.140 -92.900 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland vf 89.093 0.040 89.017 SSA Tanzania,-United-Rep. cb 90.407 -0.039 90.480 SSA Tanzania,-United-Rep. ocd -73.231 -1.093 -71.218 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. wht -100.000 -2.842 -100.000 SSA Uganda ocd -82.034 -0.003 -100.000 SSA Uganda ocd -100.000 -0.071	SSA	Swaziland	00	90.331	0.012	90.328
SSA Swaziland ocr -100.000 0.191 -100.000 SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland wht 0.000 0.000 0.000 SSA Tanzania, -United-Rep. cb 90.407 -0.039 90.480 SSA Tanzania, -United-Rep. ocr -100.000 -0.528 -100.000 SSA Tanzania, -United-Rep. pdr -96.995 -0.057 -96.322 SSA Tanzania, -United-Rep. pdr $91.00.000$ -1.899 -100.000 SSA Tanzania, -United-Rep. vf 91.110 -0.055 -82.034 SSA Uganda ccr -100.000 -2.842 -100.000 SSA Uganda cor -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 -0.071 -100.000 SSA Uganda pdr -100.000 <t< td=""><td>SSA</td><td>Swaziland</td><td>gro</td><td>-92.903</td><td>-0.140</td><td>-92.900</td></t<>	SSA	Swaziland	gro	-92.903	-0.140	-92.900
SSA Swaziland pdr -46.384 1.467 -47.924 SSA Swaziland pfb -100.000 3.466 -100.000 SSA Swaziland wht 0.000 0.000 0.000 SSA Swaziland wht 0.000 0.000 0.000 SSA Tanzania,-United-Rep. cc -90.407 -0.039 90.480 SSA Tanzania,-United-Rep. ocr -100.000 -528 -69.843 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. pfb -100.000 -2.842 -100.000 SSA Tanzania,-United-Rep. wht -100.000 -2.842 -100.000 SSA Tanzania,-United-Rep. wht -100.000 -0.033 -100.000 SSA Uganda gro -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 -0.71 -100.000 SSA Uganda pdr -100.000	SSA	Swaziland	ocr	-100.000	0.191	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Swaziland	pdr	-46.384	1.467	-47.924
SSA Swaziland vf 89.093 0.040 89.017 SSA Swaziland wht 0.000 0.000 0.000 SSA Tanzania,-United-Rep. cb 90.407 -0.039 90.480 SSA Tanzania,-United-Rep. ocr -100.000 -0.528 -100.000 SSA Tanzania,-United-Rep. ocr -100.000 -0.578 -96.332 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. pfb -100.000 -2.842 -100.000 SSA Tanzania,-United-Rep. wht -100.000 -2.842 -100.000 SSA Uganda cb -82.034 -0.003 -100.000 SSA Uganda ocr -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 0.001 1.753 -100.000 SSA Uganda vf	SSA	Swaziland	$_{\rm pfb}$	-100.000	3.466	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Swaziland	vf	89.093	0.040	89.017
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Swaziland	wht	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Tanzania,-United-Rep.	cb	90.407	-0.039	90.480
SSA Tanzania,-United-Rep. ocr -100.000 -0.528 -100.000 SSA Tanzania,-United-Rep. osd -73.231 -1.093 -71.218 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. pfr -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. wht -100.000 -2.842 -100.000 SSA Uganda ccr -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 -0.011 -100.000 SSA Uganda ocr -100.000 -0.071 -100.000 SSA Uganda pdr -100.000 0.000 0.000 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.0000 $0.$	SSA	TanzaniaUnited-Rep.	gro	-69.415	0.582	-69.843
SSA Tanzania,-United-Rep. odd -70.231 -1.093 -71.218 SSA Tanzania,-United-Rep. pdr -96.995 -0.057 -96.232 SSA Tanzania,-United-Rep. pfb -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. wht -100.000 -2.842 -100.000 SSA Uganda cb -82.034 -0.005 -82.034 SSA Uganda ocr -100.000 -0.011 -100.000 SSA Uganda ocr -100.000 -0.033 -100.000 SSA Uganda ocr -100.000 1.753 -100.000 SSA Uganda pfb 0.000 0.000 0.000 SSA Uganda wht 0.000 0.000 0.000 SSA Uganda wht 0.000 0.000 0.000 SSA Uganda wht 0.000 0.000 0.000 SSA Uganda wf	SSA	Tanzania -United-Ben	ocr	-100.000	-0.528	-100.000
SSA Tanzania,-United-Rep. pdf -13.231 -1.083 -1.1213 SSA Tanzania,-United-Rep. pfb -100.000 -1.899 -100.000 SSA Tanzania,-United-Rep. vf 91.110 -0.113 91.317 SSA Tanzania,-United-Rep. vf 91.00000 -2.842 -100.000 SSA Uganda cb -82.034 -0.005 -82.034 SSA Uganda occ -100.000 -0.033 -100.000 SSA Uganda ocd -100.000 -0.011 -100.000 SSA Uganda ocd -100.000 -0.071 -100.000 SSA Uganda ocd -100.000 -0.071 -100.000 SSA Uganda pdr -100.000 0.000 0.000 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.329 -0.003 16.329 SSA Zambia occ -100.000 0.000 0.000 <td>SEA</td> <td>Tanzania, United Pop</td> <td>ord</td> <td>72 921</td> <td>1.002</td> <td>71 218</td>	SEA	Tanzania, United Pop	ord	72 921	1.002	71 218
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Tanzania,-United-Rep.	- J-	-73.231	-1.093	-11.210
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Tanzania,-United-Rep.	par	-90.995	-0.057	-90.232
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Tanzania,-United-Rep.	pfb	-100.000	-1.899	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Tanzania,-United-Rep.	vt	91.110	-0.113	91.317
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Tanzania,-United-Rep.	wht	-100.000	-2.842	-100.000
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	SSA	Uganda	cb	-82.034	-0.005	-82.034
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Uganda	gro	-100.000	-0.033	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Uganda	ocr	-100.000	-0.011	-100.000
SSA Uganda pdr -100.000 1.753 -100.000 SSA Uganda pfb 0.000 0.000 0.000 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.000 0.000 0.000 SSA Zambia cb 96.121 0.000 96.121 SSA Zambia ocr -100.000 0.009 -100.000 SSA Zambia ocd -100.000 0.000 0.000 SSA Zambia pdr -100.000 -26.881 -100.000 SSA Zambia pdr -100.000 -26.681 -100.000 SSA Zambia vf 109.010 0.001 109.010 SSA Zambia vf 109.010 0.000 0.000 SSA Zambia vf <	SSA	Uganda	osd	-100.000	-0.071	-100.000
SSA Uganda pfn 100,000 0.000 0.000 SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda wht 0.000 0.000 0.000 SSA Uganda wht 0.000 0.000 0.000 SSA Zambia cb 96.121 0.000 96.121 SSA Zambia gro -47.221 0.023 -47.221 SSA Zambia ocr -100.000 0.009 -100.000 SSA Zambia ocr -100.000 -26.881 -100.000 SSA Zambia pfb 0.000 0.000 0.000 SSA Zambia vf 190.010 0.001 109.010 SSA Zambia vht 0.000 0.000 0.000 SSA Zambia vht 0.000 0.000 0.000 SSA Zambia vht 0.000 0.000 0.000	SSA	Uganda	pdr	-100 000	1.753	-100.000
SSA Uganda vf 16.329 -0.003 16.329 SSA Uganda vf 16.329 -0.003 16.329 SSA Zambia cb 96.121 0.000 96.121 SSA Zambia cb 96.121 0.003 -47.221 SSA Zambia ocr -100.000 0.009 -100.000 SSA Zambia ocr -100.000 0.009 -100.000 SSA Zambia pdr -100.000 0.000 0.000 SSA Zambia pdr -100.000 0.000 0.000 SSA Zambia pdr -100.000 0.000 0.000 SSA Zambia vf 109.010 0.001 109.010 SSA Zambia vf 109.010 0.000 0.000 SSA Zambia vf 109.010 0.001 109.010 SSA United-States cb -26.579 0.086 -26.579 USA United-States ocr -70.303 0.036	SSA	Uganda	pui pfb	0.000	0.000	0.000
SSA Uganda VI 10.329 -0.003 16.329 SSA Uganda wht 0.000 0.000 0.000 SSA Zambia cb 96.121 0.000 96.121 SSA Zambia gro -47.221 0.023 -47.221 SSA Zambia ocr -100.000 0.009 -100.000 SSA Zambia odd 0.000 0.000 0.000 SSA Zambia pdr -100.000 0.000 0.000 SSA Zambia pdr -100.000 0.000 0.000 SSA Zambia vf 109.010 0.001 109.010 SSA Zambia vf 109.010 0.000 0.000 SSA Zambia vf 109.010 0.000 0.000 SSA Zambia vf 109.36 -0.188 -10.934 United-States gro -10.303	SCA	Uganda	pro f	16 220	0.000	16 220
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	JOA CCA	Uganua TL. L	VI I d	10.329	-0.003	10.329
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Uganda	wht	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	cb	96.121	0.000	96.121
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	gro	-47.221	0.023	-47.221
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	ocr	-100.000	0.009	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	osd	0.000	0.000	0.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	pdr	-100.000	-26.881	-100.000
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SSA	Zambia	pfb	0.000	0.000	0.000
SSA Zambia vit 100,010 0,000 0,000 USA United-States cb -26,579 0,086 -26,579 USA United-States gro -10,936 -0,188 -10,934 USA United-States ocr -70,303 0,036 -70,304 USA United-States ocr -70,303 0.036 -70,304 USA United-States ocr -3,844 0,120 -3,845 USA United-States pdr -24,040 -0,282 -24,039 USA United-States pfb 32,932 0,113 32,931 USA United-States vf 5,532 0,039 5,532 USA United-States wht -3,006 0,072 -3,006 WEU Austria cb -43,315 -0,201 -43,310 WEU Austria gro -3,481 0,227 -3,489	SSA	Zambia	vf	109.010	0.001	109.010
USA United-States vit 0.000 0.000 0.000 USA United-States cb -26.579 0.086 -26.579 USA United-States gro -10.936 -0.188 -10.934 USA United-States ocr -70.303 0.036 -70.304 USA United-States ocr -70.303 0.022 -3.845 USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489	SSA	Zambia	wht	0.000	0.000	0.000
USA United-States gro -20.319 0.036 -20.319 USA United-States gro -10.936 -0.188 -10.934 USA United-States ocr -70.303 0.036 -70.304 USA United-States osd -3.844 0.120 -3.845 USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.066 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria continued on next page -3.489 -3.489	USA	United-States	cb	-26 579	0.000	-26 570
USA United-States gro -10.93b -0.188 -10.934 USA United-States ocr -70.303 0.036 -70.304 USA United-States osd -3.844 0.120 -3.845 USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489	USA	United States	CD	-20.079	0.000	-20.079
USA United-States ocr -70.303 0.036 -70.304 USA United-States osd -3.844 0.120 -3.845 USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489	USA	United States	gro	-10.930	-0.188	-10.934
USA United-States osd -3.844 0.120 -3.845 USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489	USA	United-States	ocr	-70.303	0.036	-70.304
USA United-States pdr -24.040 -0.282 -24.039 USA United-States pfb 32.932 0.113 32.931 USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489	USA	United-States	osd	-3.844	0.120	-3.845
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	USA	United-States	pdr	-24.040	-0.282	-24.039
USA United-States vf 5.532 0.039 5.532 USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489 continued on next page	USA	United-States	pfb	32.932	0.113	32.931
USA United-States wht -3.006 0.072 -3.006 WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489 continued on next page	USA	United-States	vf	5.532	0.039	5.532
WEU Austria cb -43.315 -0.201 -43.310 WEU Austria gro -3.481 0.227 -3.489 continued on next page	USA	United-States	wht	-3.006	0.072	-3.006
WEU Austria gro -3.481 0.227 -3.489 continued on next page	WEU	Austria	cb	-43.315	-0.201	-43.310
continued on next page	WEU	Austria	gro	-3.481	0.227	-3.489
	-	COT	tinued on no	ext page		

Simulated 70-changes in anocated area. 1997 - 2000, continued

Region	country	crop	scenario A	scneario B	scenario C
WELL	A		<u>%</u>	%	%
WEU	Austria	ocr	1.155	-0.193	1.160
WEU	Austria	osd	10.782	-0.392	10.793
WEU	Austria	vf	31.679	-0.097	31.681
WEU	Austria	wht	1.140	-0.449	1.158
WEU	Belgium	CD	-45.303	-0.482	-45.344
WEU	Belgium	gro	3.907	0.872	3.880
WEU	Belgium	ocr	-2.107	-0.355	-2.103
WEU	Belgium	osa	28.757	-1.138	28.801
WEU	Belgium	pib	21.463	-0.789	21.494
WEU	Belgium	vr	32.201	-0.110	32.205
WEU	Belgium	wnt	-2.713	-0.474	-2.708
WEU	France	CD	-01.131	0.243	-01.137
WEU	France	gro	-0.929	-0.715	-0.904
WEU	France	ocr	-5.889	0.187	-0.893
WEU	France	osa _ J_	4.409	0.520	4.390
WEU	France	par _r	-29.079	-0.085	-29.809
WEU	France	pro	10.200	0.430	10.224
WEU	France	V1	4 614	0.130	1 629
WEU	France	whit	-4.014	0.028	-4.038
WEU	Germany	CD	-39.752	-0.729	-39.727
WEU	Germany	gro	-0.432	0.035	-0.449
WEU	Germany	ocr	2.973	-0.002	2.995
WEU	Germany	osa	4.725	-1.201	4.768
WEU	Germany	pip	0.000	0.000	0.000
WEU	Germany	vi	32.025	-0.227	32.033
WEU	Germany	wht	-7.514	-0.878	-7.493
WEU	Greece	CD	-63.022	0.322	-63.035
WEU	Greece	gro	-20.213	-1.285	-20.179
WEU	Greece	ocr	-11.597	0.252	-11.607
WEU	Greece	osd	-1.239	0.865	-1.274
WEU	Greece	pdr	-58.694	-0.611	-58.691
WEU	Greece	pfb	3.066	0.617	3.041
WEU	Greece	vi	29.644	0.147	29.639
WEU	Greece	wht	-0.728	0.521	-0.737
WEU	Italy	cb	-4.523	0.041	-4.524
WEU	Italy	gro	-0.862	-0.101	-0.859
WEU	Italy	ocr	-0.966	0.039	-0.967
WEU	Italy	osd	0.928	0.044	0.927
WEU	Italy	pdr	-3.894	-0.125	-3.892
WEU	Italy	pfb	2.176	0.044	2.175
WEU	Italy	vf	7.134	0.037	7.132
WEU	Italy	wht	1.035	0.038	1.034
WEU	Netherlands	cb	-54.865	-0.168	-54.863
WEU	Netherlands	gro	-10.144	0.994	-10.182
WEU	Netherlands	ocr	0.756	-0.165	0.758
WEU	Netherlands	osd	20.167	-0.447	20.172
WEU	Netherlands	pfb	-12.529	-0.098	-12.528
WEU	Netherlands	vf	31.510	-0.029	31.511
WEU	Netherlands	wht	-15.041	-0.760	-15.003
WEU	Norway	gro	-2.817	-0.005	-2.817
WEU	Norway	osd	2.276	-0.005	2.276
WEU	Norway	vf	29.708	-0.001	29.708
WEU	Norway	wht	-6.393	0.057	-6.397
WEU	Spain	cb	-71.466	0.330	-71.478
WEU	Spain	gro	-17.851	-0.835	-17.829
WEU	Spain	ocr	-5.697	0.533	-5.716
WEU	Spain	osd	-10.385	1.043	-10.422
WEU	Spain	pdr	-67.511	-1.735	-67.486
WEU	Spain	pfb	-4.747	0.637	-4.770
WEU	Spain	\mathbf{vf}	29.104	0.204	29.097
WEU	Spain	wht	-11.383	0.709	-11.396
WEU	Sweden	$^{\rm cb}$	-37.887	-0.018	-37.885
WEU	Sweden	gro	0.882	-0.029	0.885
WEU	Sweden	ocr	-8.522	-0.009	-8.521
WEU	Sweden	osd	8.164	-0.031	8.166
WEU	Sweden	vf	30.751	-0.005	30.751
WEU	Sweden	wht	-9.369	0.142	-9.380
WEU	Switzerland	cb	-43.155	-0.255	-43.150
WEU	Switzerland	gro	-6.120	0.884	-6.153
WEU	Switzerland	ocr	1.310	-0.254	1.315
WEU	Switzerland	osd	-0.471	-0.445	-0.462
WEU	Switzerland	vf	30.839	-0.104	30.841
WEU	Switzerland	wht	-2.496	-0.708	-2.467
WEU	United-Kingdom	cb	-42.678	-0.591	-42.658
WEU	United-Kingdom	gro	0.301	0.791	0.278
		continued on n	ext page		

Simulated %-changes in allocated area: 1997 - 2050, continued

Region	country	crop	scenario A	scneario B	scenario C	
			%	%	%	
WEU	United-Kingdom	ocr	3.018	-0.578	3.038	
WEU	United-Kingdom	osd	3.658	-1.064	3.694	
WEU	United-Kingdom	pfb	11.094	-0.802	11.121	
WEU	United-Kingdom	vf	31.287	-0.154	31.292	
WEU	United-Kingdom	wht	-8.115	-0.763	-8.096	

Region	country	scenario A	scenario B	scenario C
		%	%	%
ANZ	Australia	8.961	-0.924	8.972
ANZ	New-Zealand	0.447	-0.166	0.444
CAM	Costa-Rica	-33.842	-0.042	-33.841
CAM	Honduras	-30.630	0.005	-30.630
CAM	Mexico	-53.717	0.658	-53.717
CAM	Nicaragua	-22.989	-0.099	-22.989
CAN	Canada	-67.847	1.182	-67.863
CEE	Albania	428.650	-0.753	429.310
CEE	Bulgaria	315.750	-0.738	317.210
CEE	Croatia	275.060	-0.167	275.610
CEE	Hungary	306.090	0.673	304.310
CEE	Poland	409.790	0.239	409.660
CEE	Romania	319.820	-0.642	321.600
CEE	Slovenia	308.800	-0.040	308,800
CHI	China	155 930	-0.059	155 540
CHI	Korea -Dem -People's-Bep	211 440	-0.592	211 370
CHI	Mongolia	151 470	-0.135	151 760
FSU	Azerbaijan	180.000	0.000	180.000
FSU	Kazakhetan	486 120	2 100	476.880
FSU	Kurgugatan	180.000	2.133	180.000
FSU	Ryigyzstan Russian Federation	152 840	0.000	452 520
FSU	To illiot an	177 700	-0.279	403.000
FSU	Tajikistan	177.790	-0.794	180.010
FSU	Turkmenistan	178.810	-0.427	180.000
FSU	Ukraine	179.660	-0.123	180.010
FSU	Uzbekistan	186.110	-0.604	187.850
JPK	Japan	42.108	-0.417	42.117
JPK	Korea,-Rep.	46.174	-0.361	46.179
MAF	Egypt	94.531	-0.615	94.575
MAF	Morocco	50.818	-0.017	50.851
MAF	Tunisia	78.428	-0.109	78.436
MDE	Iran,-Islamic-Rep.	445.560	0.178	443.910
MDE	Syrian-Arab-Rep.	286.830	-0.075	287.080
MDE	Turkey	417.840	-0.117	417.880
SAA	Bangladesh	75.885	-0.608	75.893
SAA	India	135.000	0.212	134.980
SAA	Pakistan	93.705	0.453	93.658
SAA	Sri-Lanka	156.640	-0.338	156.630
SAM	Argentina	135.060	-0.185	135.120
SAM	Bolivia	125.480	-0.096	125.310
SAM	Brazil	104.650	-0.382	105.190
SAM	Chile	120.130	-0.085	120.170
SAM	Colombia	123.800	-0.129	123.840
SAM	Ecuador	153.910	0.004	153.890
SAM	Paraguay	132.150	-0.406	132.570
SAM	Peru	125.810	-0.111	125.760
SAM	Suriname	38.110	-0.001	38.111
SAM	Uruguay	112 280	-0.925	113 500
SAM	Venezuela	124 570	0.000	124 570
SEA	Cambodia	66 228	1 311	65 142
SEA	Indonesia	93 320	-0.808	93 574
SEA	Lao People's Dem Ben	34 725	0.164	34 576
SEA	Malaysia	111 590	0.104	111 620
SEA	Maraysia Maraysia (Damas)	62.064	-0.515	62.070
SEA	Dhilipping	100 710	-0.001	100.850
SEA	r muppines	100.710	-0.230	100.850
SEA	I nanand	137.400	0.241	137.300
SEA	vietnam	00.128	-0.358	00.370
515	Cuba	188.250	0.268	186.450
SSA	Cameroon	196.440	0.087	196.440
SSA	Central-African-Republic	141.500	0.130	141.500
SSA	Congo,-DemRepof-the	109.700	0.000	109.700
SSA	Congo,-Repof-the	109.960	0.000	109.960
SSA	Kenya	228.970	0.223	229.040
SSA	Liberia	27.790	-2.287	28.818
	continued of	on next page		

Table VIII.: Simulated %-changes in total revenue: 1997 - 2050

Region	country	scenario A	scneario B	scenario C
		%	%	%
SSA	Mozambique	141.300	0.086	141.250
SSA	Nigeria	259.100	-0.010	259.100
SSA	South-Africa	185.340	0.593	184.540
SSA	Swaziland	252.320	-0.008	252.270
SSA	Tanzania,-United-Rep.	260.530	0.090	260.820
SSA	Uganda	135.190	-0.002	135.190
SSA	Zambia	254.240	0.002	254.240
USA	United-States	-12.165	-0.430	-12.162
WEU	Austria	-15.493	0.506	-15.506
WEU	Belgium	27.760	0.273	27.749
WEU	France	1.646	-0.448	1.655
WEU	Germany	9.338	0.905	9.308
WEU	Greece	34.783	-0.342	34.789
WEU	Italy	-72.651	-1.438	-72.608
WEU	Netherlands	55.890	-0.003	55.890
WEU	Norway	12.879	0.007	12.879
WEU	Spain	43.882	-0.248	43.885
WEU	Sweden	-23.564	0.059	-23.568
WEU	Switzerland	14.930	0.369	14.924
WEU	United-Kingdom	13.052	0.724	13.028

Simulated %-changes in total revenue: 1997 - 2050, continued

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